SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

Main Office
818 West Seventh Street
12th Floor
Los Angeles, California
90017-3435

t (213) 236-1800
f (213) 236-1825

www.scag.ca.gov

MEETING OF THE

SOLID WASTE TASK FORCE

Wednesday, October 24, 2007
10:00 a.m. – 12:00 p.m.

SCAG Offices
818 West 7th Street, 12th Floor
Conference Room – Riverside A
Los Angeles, CA 90017
213.236.1800

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Jacob Lieb at 213.236.1921 or lieb@scag.ca.gov or Christine Fernandez at 213.236.1923 or fernande@scag.ca.gov.

Agendas and Minutes for the Solid Waste Task Force are also available at:

http://www.scag.ca.gov/rcp/solidhazardouswaste.htm

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. If you require such assistance, please contact SCAG at (213) 236-1868 at least 72 hours in advance of the meeting to enable SCAG to make reasonable arrangements. To request documents related to this document in an alternative format, please contact (213) 236-1868.

SOLID WASTE TASK FORCE

AGENDA

PAGE # | TIME

"Any item listed on the agenda (action or information) may be acted upon at the discretion of the Committee."

1.0 CALL TO ORDER & PLEDGE OF ALLEGIANCE — **Hon. Toni Young, Chair**

2.0 PUBLIC COMMENT PERIOD

Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of the Committee, must fill out and present a speaker's card to the Assistant prior to speaking. A speaker's card must be turned in before the meeting is called to order. Comments will be limited to three minutes. The chair may limit the total time for all comments to twenty (20) minutes.

3.0 REVIEW and PRIORITIZE AGENDA ITEMS

4.0 CONSENT CALENDAR

4.1 Approval Item

4.1.1 Minutes of September 26, 2007 Meeting
Attachment

4.1.2 Minutes of October 9, 2007 Meeting
Attachment

4.2 **Receive and File**

4.2.1 Membership List with Contact Information
Attachment

5.0 INFORMATION ITEMS

5.1 SB 1016 (Wiggins) - Waste Diversion — Jeff Dunn, **SCAG Staff** — **20 min**
Attachment
Staff will present an update of proposed amendments to SB 1016 and discuss possible implications of the bill.

AGENDA

		PAGE #	TIME
5.2	RCP Solid Waste Chapter – draft form **Attachment** Staff will present a revised draft that incorporates comments and revisions from the Oct 9, 2007 SWTF meeting and the Oct 17, 2007 RCP Task Force meeting.	Christine Fernandez, **SCAG Staff**	**20 min**

6.0 CHAIR'S REPORT — **Hon. Toni Young, Chair**

7.0 FUTURE AGENDA ITEMS

Any Committee members or staff desiring to place items on a future agenda may make such request.

8.0 ANNOUNCEMENTS

9.0 ADJOURNMENT

The next meeting of the Solid Waste Task Force will be held on Wednesday, November 28, 2007 in the SCAG offices in downtown Los Angeles.

Solid Waste Task Force

Minutes for September 26, 2007

The following minutes are a summary of actions taken by the Solid Waste Task Force.

The Solid Waste Task Force held its meeting at the Southern California Association of Governments offices in Los Angeles. The meeting was called to order by Chair Toni Young, City of Port Hueneme.

Members Present	Representing
Toni Young	Port Hueneme
Mike Mohajer	LA County IWMTF
Bob Perez	City of Los Angeles DWP
Margaret Clark	City of Rosemead
Glenn Acosta	LACSD
Mike Miller	Ex-Officio
Nancy Sansonetti (phone)	San Bernardino Solid Waste Mgmt
Stan Carroll	La Habra Heights
Kobe Skye	LA County DPW

1.0 CALL TO ORDER & PLEDGE OF ALLEGIENCE

Toni Young, Chair, called the meeting to order at 10:05a.m.

2.0 PUBLIC COMMENT PERIOD

No public comment.

3.0 REVIEW AND PRIORITIZE AGENDA ITEMS

4.0 CONSENT CALENDAR

4.1 **Approval Item(s)**

4.1.1 The Minutes of August 27, 2007

4.2 **Receive and File**

4.2.1 Membership List with Contact Information

The Consent Calendar was approved as submitted.

Doc #140047v1
08/21/07 D. Salcido

5.0 INFORMATION ITEMS

5.1 Source Separation and Recycling

Richard Anthony, Richard Anthony Associates, HDR, provided a presentation on resource strategies and recycling markets in the SCAG region and abroad.

5.2 RCP Solid Waste Chapter

Because of the number of suggested revisions regarding the draft chapter, Jacob Lieb, SCAG Staff, suggested that the group meet for a working session to complete the chapter. The group agreed to e-mail their suggested revisions to Jacob and the others and then meet for a working session on Tuesday, October 9, 2007, 9:00 a.m. – 11:00 a.m. at SCAG.

6.0 CHAIRS REPORT

7.0 FUTURE AGENDA ITEMS

8.0 ADJOURNMENT

The meeting was adjourned at 12:00 noon.

Solid Waste Task Force

Minutes for October 9, 2007

The following minutes are a summary of actions taken by the Solid Waste Task Force.

The Solid Waste Task Force held its meeting at the Southern California Association of Governments offices in Los Angeles. The meeting was called to order by Member Margaret Clark, City of Rosemead.

Members Present	**Representing**
Toni Young	**Port Hueneme**
Mike Mohajer (Phone)	**LA County IWMTF**
Margaret Clark	**City of Rosemead**
Glenn Acosta (Phone)	**LACSD**
Stan Carroll	**La Habra Heights**
Joe Mike Bartoleta	**LA County DPW**
Chuck Agu	**LA County DPW**

1.0 CALL TO ORDER & PLEDGE OF ALLEGIENCE

Margaret Clark, Member, called the meeting to order at 9:05a.m.

2.0 PUBLIC COMMENT PERIOD

Mike Mohajer, LA County IWMTF, provided information on the proposed amendment to SB 1016. The Bill has passed the Senate and is now in the Assembly Natural Resources Committee for consideration. The members requested that this item be agendized for their next meeting.

3.0 REVIEW AND PRIORITIZE AGENDA ITEMS

4.0 CONSENT CALENDAR

4.1 Approval Item(s)

None

4.2 Receive and File

4.2.1 Membership List with Contact Information

The Consent Calendar was approved as submitted.

Doc #140900v1
10/16/07 D. Salcido

5.0 INFORMATION ITEMS

5.1 RCP Solid Waste Chapter

Christine Fernandez, SCAG Staff, reviewed the revised version of the Solid Waste Chapter with the task force members.

Christine informed the group that staff tried to address the waste disposal problem in the first part of the chapter as well as include factors for citing land fills and technology and regulatory controls involved. Staff also tried to make land fill impacts more neutral sounding.

Staff emphasizes the need for more land fills in the current and any waste management scenario there is. The waste by rail section has been modified and a link between resource consumption and waste has been added so that the flow of the chapter flows into the need for zero waste and need for reduction before it becomes a product.

Some of the recycling verbage has been modified and there is a discussion on energy savings from recycled materials and a section on green building has been added.

Chuck Agu, L.A. County Department of Public Works, the county intends to submit comments to the chapter and will be forwarding those the SCAG by October 11.

Margaret Clark, raised concern with the term "zero waste" being misused and turned into legislation with unfunded mandates. She would like to see the term taken out of the entire document, because she feels it is an unachievable goal.

Toni Young agreed that "zero waste" would be misconstrued to not include diversion credit for conversion technology. She suggested utilizing a different term such as this is only achievable through new technologies instead of promoting "zero waste".

The group decided that the term "zero waste" should be removed from the chapter.

Glenn Acosta suggested that wording be that SCAG's goal is to lessen the reliance on land fill disposal through the implementation of diversion technologies and increased recycling, etc.

Margaret Clark and Toni Young suggested the wording be changed to "maximum diversion from land fills through the implementation of new technologies". Toni Young suggested that the wording "with new and potential conversion technology zero waste could become a goal", be added in the body of the chapter.

Glenn Acosta suggested that if SCAG has a future vision of what the hierarchy of solid waste management should be then that should be highlighted in the chapter.

Christine Fernandez informed the group that Mike Miller has provided her with a pyramid type flow chart.

Toni Young asked that the term on page 25 "create tax incentives or subsidies" should delete "or subsidies".

Toni Young suggested that in Outcomes, term should say "conversion technologies with diversion credit should be available". Another outcome should be added "that as landfills close in the urban areas, rail, with the cleanest possible technology, will be used to remote state landfills".

Mike Mohajer suggested that all of the editorial comments be taken out of the chapter.

Toni Young suggested that "methane reuse by landfills" should be highlighted. She also asked that the suggestion that "eventually landfill liners will leak", be taken out.

Margaret Clark suggested that on Page 2, in the box, "Landfills are a major contributor of greenhouse gases, Worldwide, landfills account for 25% of human-made methane emissions" be deleted.

Glenn Acosta, provided an alternative, "Landfill operators in Southern California, are trying to make a beneficial use of landfill gas by producing renewable energy".

Jacob Lieb, SCAG Staff, suggested that the wording regarding rail transportation should read "any rail operations would be consistent with other rail and air quality planning efforts that are going on in the region, including the AQMP and RTP".

Toni Young suggested that the disposal rate on page 13 in Outcomes should be changed from 30% waste disposal to landfills to 40%.

Margaret Clark raised concern with negative comments regarding conversion technologies on Page 8 and suggested it be changed. She also suggested that on page 10 both boxes should be deleted.

Toni Young suggested that on page 10 the sentence read "Maximum diversion strategies that look at the entire product life cycle to assess the true environmental and health related costs of manufacturing of products are necessary". She also suggested that the term LCA on recycling be included and costs and benefits need to be explored.

Margaret Clark suggested that on Page 19, State and Government Policies, SW22 should read "contingent on conversion technology credit". On page 24, 1st bullet, "create

ordinances that encourage items such as construction and demolition material to not be disposed in a landfill.

6.0 CHAIRS REPORT

7.0 FUTURE AGENDA ITEMS

- SB 1016 Amendments

8.0 ADJOURNMENT

The meeting was adjourned at 11:30 a.m.

SOLID WASTE TASK FORCE AGENDA

October 24, 2007
10:00 a.m. to 12:00 noon.

Name	Address	Phone	Fax	e-mail
Acosta, Glenn	Mr. Glenn Acosta, P.E. 1955 Workman Mill Road Whittier, CA 90601	(562) 699-7411 ext.2723	(562) 695-1874	gacosta@lacsd.org
Carroll, Stan	Mr. Stan Carroll 659 Lamat Road La Habra Heights, CA 90631	(562) 690-4645		GW1763@aol.com
Cook, Debbie	Hon. Debbie Cook 6692 Shetland Circle Huntington Beach, CA 92648	(714) 536-5553	(714) 536-5233	hbdac@hotmail.com
Clark, Margaret	Hon. Margaret Clark 3109 N. Prospect Rosemead, CA 91770	(626) 288-7308	(626)307-9218	clarkeeesc@yahoo.com
Martin, Kay	Ms. Kay Martin Vice President, BioEnergy Producers Assn. 236 Ferro Drive Ventura, CA 93001	(805) 653-5935		kay4bioenergy@aol.com
Miller, Michael	Mr. Michael Miller P.O. Box 4742 West Covina, CA 91791	(626) 337-1606	(626) 337-3397	millereviron@earthlink.net
Miller, Scott	Mr. Scott Miller 12360 Landale Street Studio City, CA 91604	(818) 508-5514		miller@performancepgraphics.com
Mohajer, Mike	Mr. Mike Mohajer P.O. Box 3334 San Dimas, CA 91773	(909) 592-1147		mikemohajer@yahoo.com
Nelson, Larry	Hon. Larry Nelson Councilmember, City of Artesia 18747 Clarkdale Ave Artesia, CA 90701-5899	(562) 865-6262	(562) 865-6240	lnelson@cityofartesia.org
Paxton, Lynda	Ms. Lynda L. Paxton	Office (805) 347-9990 Cell (714) 412-0745		llpaxton@comcast.net

SOLID WASTE TASK FORCE AGENDA

October 24, 2007

10:00 a.m. to 12:00 noon.

Sansonetti, Nancy	Ms. Nancy Sansonetti Supervising Planner/Chief Planning & Permitting Section Solid Waste Management Division 222 W. Hospitality Ln San Bernardino, CA 92415	(909) 386-8778	(909) 386-8964	NSansonetti@swm.sbcounty.gov
Skye, Coby	Mr. Coby Skye Associate Civil Engineer Environmental Programs Division Los Angeles Department of Public Works 900 S. Fremont Ave. Annex 3rd Floor Alhambra, CA 91803-1331	(626) 458-5163	(626) 458-35943	cskye@ladpw.org
Smith, Greig	Hon. Greig Smith Councilmember, City of Los Angeles District 12 200 N. Spring Street, 4th FL Room 405 Los Angeles, CA 90012	(213) 473-7012	(213) 473-6925	smith@council.lacity.org
Van Arsdale, Lori	Hon. Lori Van Arsdale Councilmember, City of Hemet 445 E. Florida Ave Hemet, CA 92543	(951) 765-2303	(951) 765-3785	lvanarsdale@ci.hemet.ca.us
Vizcarra, Joe	Mr. Joe Vizcarra Lt. Traffic Operations Center Los Angeles Communications Center California Highway Patrol 120 S. Spring Street Los Angeles, CA 90012	(213) 897-6136	(213) 897-0519	jvizcarra@chp.ca.gov
Young, Toni (Chair)	**Hon. Toni Young Councilmember, City of Port Hueneme 766 Polaris Way Port Hueneme, CA 93041-2333**	**(805) 986-6500**	**(805) 986-6581**	**ottoandtoni@roadrunner.com**

Item 5.1 SB 1016 (Wiggins)

Christine Fernandez

From: Mike Mohajer [mikemohajer@yahoo.com]
Sent: Monday, October 08, 2007 2:11 PM
To: Garbien, Ania
Cc: Margo Reid Brown; Wesley Chesbro; Jeffrey Danzinger; Rosalie Mule; Cheryl Peace; Gary Petersen
Subject: SB 1016 (Wiggins) - 10/2/07 Proposed Amendments (A Copy Attached)
Attachments: SB 1016 (2).pdf; SB 1016 Draft Leg Language 9-27-2007.doc

On behalf of the Los Angeles County Integrated Waste Management Task (Task Force), I want to thank you for the opportunity to review and comment on the latest draft amendments (10/2/07) to SB 1016, a copy attached. While we appreciate Senator Wiggins' efforts to revise the current state Diversion Rate Measurement System, many of the concerns listed in our letter of July 11, 2007, a copy attached, are not addressed by the latest amendments. Among other things, we are concerned that the proposal:

1. Would increase the state mandatory diversion rate to 88% by January 1, 2020. It establishes the 2006 disposal rate as the *base year* while prohibiting any future increases in the disposal rate even if it has been caused by growth in population and/or economic factors.

2. Would fail to address the need to conduct a cost/benefit and feasibility analysis of an increased diversion rate in concert with local governments and other stakeholders and make a determination that any proposed increase in the diversion rate is justified.

3. Would fail to reevaluate the solid waste management hierarchy that was established by AB 939 over 18 years ago. Before there is any state-mandated increase in the diversion rate, new alternatives to solid waste management other than landfilling, recycling, composting and incineration need to be considered.

4. Would fail to place any responsibility on manufacturers for their products and the management of sustainable recovery programs. The "product stewardship" needs to be a component of any state-mandated increase in diversion rates.

5. Would place a substantial increase in responsibility for the development of markets for diverted materials on local governments while failing to address the role of the State.

6. Would avoid placing a shared responsibility on State governmental agencies, the California University and College systems, special districts and school districts to reduce waste generation/disposal. While it is recognized that each State governmental agency is required to prepare an integrated waste management plan, the proposal fails to provide a meaningful enforcement mechanism for the implementation failure or achieving the mandated goals similar to those imposed on cities, counties and regional agencies.

7. Would attempt to prohibit the future development of alternative technologies, such as conversion technologies. It also attempts to eliminate the existing 10% diversion credit for biomass and waste-to-energy facilities.

8. Would pursue the existing mathematical compliance requirements (disposal tonnage) at the jurisdictional level while failing to consider the efforts of the California Integrated Waste Management Board to develop alternatives to the said requirements during the past few years, including the time Senator Wiggins served on the Board. As such jurisdictions, especially those in Southern California, would have to continue to spend substantial resources to insure mathematical compliance rather than implementing diversion programs.

The Task Force looks forward to our continued working relationship to address these concerns that are highly important to local governments. Should you have any questions, please contact me at 909-592-1147.

cc; Task Force Members & Alternates

MIKE MOHAJER, Member
LA County IWM Task Force
mikemohajer@yahoo.com

-----Original Message-----
From: Garbien, Ania [mailto:Ania.Garbien@SEN.CA.GOV]
Sent: Tuesday, October 02, 2007 1:34 PM

Item 5.1 SB 1016 (Wiggins)

To: karen.coca@lacity.org; psmith@rcrcnet.org; Cwhite1@wm.com; sweetster@aol.com; chelgi@worldnet.att.net; pane@cwo.com; cberg@govadv.com; kross@cacities.org; sjlegsac@pacbell.net; mikemohajer@yahoo.com; khampel@ci.burbank.ca.us; rsalas@ci.burbank.ca.us; scottsmithline@cawrecycles.org; TDyson@ciwmb.ca.gov; RDavis@ciwmb.ca.gov; murray@cawrecycles.org; jkastor@astor-phillips.com; kkeene@counties.org; dgambelin@norcalwaste.com; MaryP@rcrcnet.org; paul@shawyoder.org; slgs@slgs.org; kstoddard@wm.com; KJJensen@shjlobby.com; Mark.Urquhart@shawgrp.com; ghyatt@iwpnews.com; murray@cawrecycles.org; scottsmithline@cawrecycles.org; kacoca@san.lacity.org; jkastor@astor-phillips.com; evan@edgarinc.org; dgambelin@norcalwaste.com; MaryP@rcrcnet.org; maprea@apreacompany.com; magavern@sierraclub-sac.org; slgs@slgs.org; kstoddard@wm.com; dunn@scag.ca.gov; mark@pwcg.net; greg.hyatt@iwpnews.com; MANDYR@IWM.CO.SAN-BENITO.CA.US; jwoolley@co.humboldt.ca.us; jtest@hwma.net; sgreen@lacsd.org; mattcotton@minspring.com; Mark White; Michael Gross; Tim Dewey-Mattia
Subject: Save the Date - SB 1016 (Wiggins) Meeting
Importance: High

Hello Everyone ~

Hope you all had a good end of session.

We have scheduled a stakeholder meeting for Tuesday, October 9, from 10 am - 12 pm in Room 4203 at the Capitol.

Attached is the current draft language on SB 1016.

When the previous version of SB 1016 was discussed these were the top six issues of concern:

1. Why are we using 2006 as the base year? Could we use a three year average as the new base year? (Cities, Counties and Rurals)

2. Siting Element of NDFE should include processing capacity or host credit language? (CRRC)

3. Transformation credit and how does it convert in a disposal measurement system? (Chuck White at WM and Coby Skye with LA County and LA Sanitation District)

4. What reward/benefit do the jurisdictions who are currently at 50 percent or higher receive? (most stakeholders)

5. What reward/benefit do those jurisdiction get, who are not quite at 50 percent, but since 1990 have shown a steady decline in disposal verses those jurisdiction who meet the 50 percent requirement, but still have had a steady increase in disposal since 1990.

Changes in the attached version (and there are many) include; removing the county-wide trigger and back to each jurisdiction, biennial review for all jurisdictions, and expanded leg intent language.

We look forward to seeing you at the October 9 meeting as this is the first one in a series of three that we are anticipating to have during interim.

As always, thank you!

<<SB 1016 Draft Leg Language 9-27-2007.doc>>

Ania Garbien
Legislative Aide
Senator Patricia Wiggins
State Capitol, Room 4081
Phone: 916.651.4002
Fax: 916.323.6958

Item 5.1 SB 1016 (Wiggins)

LOS ANGELES COUNTY
SOLID WASTE MANAGEMENT COMMITTEE/
INTEGRATED WASTE MANAGEMENT TASK FORCE
900 SOUTH FREMONT AVENUE, ALHAMBRA, CALIFORNIA 91803-1331
P.O. BOX 1460, ALHAMBRA, CALIFORNIA 91802-1460
www.lacountyiswmtf.org

DONALD L. WOLFE
CHAIRMAN

July 11, 2007

The Honorable Patricia Wiggins
State Capitol, Room 4081
Sacramento, CA 95814

Dear Senator Wiggins:

DRAFT REVISIONS TO SENATE BILL 1016 - CIRCULATED FOR STAKEHOLDER COMMENT 0N JUNE 7, 2007

On behalf of the Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force), we respectfully submit the following comments regarding the circulated draft revisions to SB 1016, dated June 5, 2007. The Task Force recognizes the importance of revising the current State Diversion Rate Measurement System (DRMS), and we appreciate your instrumental work and years of service with the California Integrated Waste Management Board (Waste Board) and the State Legislature in working to improve the State's solid waste management infrastructure.

Pursuant to Chapter 3.67 of the Los Angeles County Code and the California Integrated Waste Management Act of 1989 (AB 939, as amended), the Task Force is responsible for coordinating the development of all major solid waste planning documents prepared for the County of Los Angeles and its 88 cities in Los Angeles County with a combined population in excess of 10 million. Consistent with these responsibilities, and to ensure a coordinated and cost-effective and environmentally-sound solid waste management system in Los Angeles County, the Task Force also addresses issues impacting the system on a Countywide basis. The Task Force membership includes representatives of the League of California Cities-Los Angeles County Division, the County of Los Angeles Board of Supervisors, the City of Los Angeles, the waste management industry, environmental groups, the public, and a number of other governmental agencies.

The proposed June 5, 2007, draft revisions and/or the April 10, 2007, amendments to SB 1016, if enacted, would authorize the Waste Board to allow a city or county to

submit certain information in the annual report on a biennial, rather than an annual basis, if the Waste Board has determined that the city or county has diverted more than 50 percent of solid waste from landfill disposal (excluding transformation facilities), through source reduction, recycling, and composting activities.

For many years, the Task Force has called attention to the inherent deficiencies in the State's DRMS. Complying with the waste diversion mandate places a significant burden on local jurisdictions, which expend needless resources documenting and validating generation data rather than investing in and implementing waste reduction and recycling programs and activities. The DRMS has created an uncertain end result (with significant consequences) where on one hand, many jurisdictions have legitimately implemented all feasible waste diversion efforts, but cannot be demonstrated mathematically, and on the other hand, some jurisdictions benefit from inaccuracies with high diversion rates not merited by their level of program implementation.

The fundamental premise of SB 1016 is to reduce the burden of mathematical compliance – so called "bean counting" – on local jurisdictions by focusing more on easily measurable data (i.e. disposal rather than generation), program implementation, and streamlining the reporting process. The Task Force wholeheartedly supports this premise; however, we are concerned that language contained in the June 5, 2007, draft revision may have unintended consequences that move farther away from this perspective. By fixing disposal levels, SB 1016 would effectively require jurisdictions to divert more from disposal each year in order to account for growth and other factors. In light of this indefinite goal, we ask that you address the following key issues in subsequent revisions of the Bill's language:

1. A cost/benefit and feasibility analysis of an increased diversion rate should be conducted – in concert with local governments and other stakeholders- in order to determine that any proposed increase in the diversion rate is justified.

2. Streamlining and simplifying reporting requirements is a strong point of this proposal, therefore we urge you to retain the countywide/regional agency basis for disposal evaluations, rather than city-by-city reporting.

3. Develop and implement measures to improve and enhance the State's recycling and composting market development efforts.

4. Provide local governments with the financial and technical resources needed to achieve a higher diversion rate.

5. Require manufacturers to take more responsibility for the life cycle impacts of their products, via take back programs, State minimum standards, and other measures.

6. Rather than implementing all programs listed in a jurisdiction's SRRE, jurisdictions should be urged to implement diversion programs that have proven cost-efficient and effective.

7. The State must take into consideration extenuating factors, such as economic and population growth, in determining if a jurisdiction has met its diversion requirements.

8. As currently written, jurisdictions could only utilize credit for transformation or biomass conversion at the quantity they used in their base year, and only if all jurisdictions within the County and/or Regional Agency are implementing all of their diversion activities. These arbitrary limitations add another level of difficulty to jurisdictions attempting to divert material from landfill disposal, and should both be stricken.

9. Place a shared responsibility on State and regional governmental agencies as well as the California University and College systems, special districts and school districts, to reduce waste disposal.

10. Conduct a study on China's role and their processing/manufacturing impact on California markets for recyclable materials as well as the effect on California's air quality.

11. The solid waste management hierarchy, established by AB 939 over 18 years ago, is long overdue and needs to be reevaluated, especially in light of AB 32, the California Global Warming Solutions Act of 2006.

12. Finally, if jurisdictions are expected to divert more and more materials from landfill disposal, they must be given additional tools to do so, including the ability to develop solid waste management infrastructure such as composting facilities and conversion technologies.

Thank you for the opportunity to submit comments on this proposal. The Task Force looks forward to our future working relationship so that we can collectively address the above mentioned issues that are highly important to local governments.

If you have any questions, please contact Mr. Mike Mohajer of the Task Force at (909) 592-1147.

Sincerely,

Margaret Clark

Margaret Clark, Vice-Chair
Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force and
Council Member, City of Rosemead

VJ/CS:cw

cc: California Integrated Waste Management Board
Each Member of the County of Los Angeles Board of Supervisors
Each City Mayor in the County of Los Angeles
California State Association of Counties
League of California Cities
League of California Cities, Los Angeles County Division
Southern California Association of Governments
Solid Waste Association of North America
San Gabriel Valley Council of Governments
South Bay Cities Council of Governments
Each City Recycling Coordinator in Los Angeles County
Each Member of the Los Angeles County Integrated Waste Management Task Force

DIVISION 30. WASTE MANAGEMENT

PART 1. INTEGRATED WASTE MANAGEMENT

Chapter 1. General Provisions

ARTICLE 1. FINDINGS AND DECLARATIONS

40001. (a) The Legislature declares that the responsibility for solid waste management is a shared responsibility between the state and local governments. The state shall exercise its legal authority in a manner that ensures an effective and coordinated approach to the safe management of all solid waste generated within the state and shall oversee the design and implementation of local integrated waste management plans.

(b) The Legislature further declares that it is the policy of the state to assist local governments in minimizing duplication of effort, and in minimizing the costs incurred, in implementing this division through the development of regional cooperative efforts and other mechanisms which comply with this division.

(c) The Legislature further declares that market development is the key to successful and cost-effective implementation of the ~~25 percent and 50 percent diversion~~ solid waste disposal reduction requirements required pursuant to Section 41780, and that the state must take a leadership role, pursuant to Chapter 1 (commencing with Section 42000) of Part 3, in encouraging the expansion of markets for recycled products by working cooperatively with the public, private, and nonprofit sectors.

(d) The Legislature further declares that all solid waste should be properly managed in order to minimize the generation of waste, maximize the diversion of solid waste away from disposal facilities, and manage all solid waste to its highest and best use, in accordance with the waste management hierarchy in section 40051 and in support of the California Global Warming Solutions Act of 2006.

(e) The Legislature further declares that to increase the environmental benefits of diversion and decrease the environmental impacts of solid waste disposal, the amount of solid waste disposed annually must be decreased through the implementation of a comprehensive array of diversion programs.

(f) The Legislature further declares that the way in which diversion progress is measured needs to change to ensure increased accuracy, timeliness, and emphasis on implementing diversion programs instead of chasing numbers.

(g) The Legislature further declares that jurisdiction and statewide disposal and reductions in disposal shall be measured using the board's disposal reporting system pursuant to section 41821.5.

(h) The Legislature further declares that while the goals set forth in the Act are measured and discussed in terms of disposal reductions, the intent is for disposal to be reduced through source reduction, recycling and composting consistent with the waste management hierarchy in section 40051.

(i) The Legislature further declares that in order to allow jurisdictions time to build the necessary markets and diversion infrastructure, the new series of aggressive disposal reduction goals are to be phased in as follows:

(1) phase one (2010 through 2011) will limit disposal to 2006 disposal levels. By preventing increases in disposal due to economic growth, phase one will create increased diversion of materials from landfills and economic benefits as markets and infrastructure are developed and enhanced.

(2) phase two (2012 through 2019) will require annual disposal to be reduced by 25% compared to 2006 disposal levels.

(3) phase three will require annual disposal to be reduced by 50% compared to 2006 disposal levels starting on January 1, 2020. Holding statewide disposal at 2006 levels until 2020 would be approximately equivalent to 75% diversion statewide; further reducing statewide disposal by 50% by 2020 will be approximately equivalent to 88% diversion statewide.

(j) The Legislature further declares that most jurisdictions have made significant efforts in increasing diversion and decreasing disposal and that those jurisdictions who have exceeded existing goals and/or complied with existing laws should have those efforts recognized and not be penalized by uniform processes that treat all jurisdictions the same regardless of prior efforts and achievements.

(k) The Legislature further declares that because rural counties (counties which disposed of 100,000 tons or less in 2006), make up only 2% of statewide disposal, face unique challenges

with distance to markets and economies of scale and present the biggest challenge to accurate disposal goal measurement, they should have reduced goals which reflect these difficulties.

Chapter 2. Definitions

40105.5."Base tonnage " means the total tonnage of solid waste disposed of by a jurisdiction during the calendar year 2006, as determined by the board pursuant to Section 41821.5.

40127. "Diversion program" means a program in the jurisdiction source reduction and recycling element, that have the purpose of diverting solid waste from landfill disposal or transformation, through source reduction, recycling, and composting activities.

40144. "Jurisdiction" means a city, county, city and county, or board approved regional agency.

40205. "Uniform Electronic Transactions Act" means Title 2.5 (commencing with Section 1633.1) of Part 2 of Division 3 of the Civil Code.

PART 2. INTEGRATED WASTE MANAGEMENT PLANS

Chapter 2. City Source Reduction and Recycling Elements

ARTICLE 2. WASTE CHARACTERIZATION COMPONENT

41033. Any waste characterization component prepared by a city pursuant to Section 41032, and any other information submitted by a city to the board on the quantities of solid waste disposed of by the city, shall include data which is as accurate as possible, on the quantities of solid waste ~~generated, diverted, and~~ disposed of, to enable the board, to the maximum extent possible, to accurately measure the ~~diversion~~ requirements ~~of paragraph (2) of subdivision (a)~~ of Section 41780.

ARTICLE 3. SOURCE REDUCTION COMPONENT

41050. The city source reduction component shall include a program and implementation schedule which shows the methods by which the city will, in combination with the recycling and composting components, reduce a sufficient amount of solid waste disposed of by the city to comply with the ~~diversion~~ requirements of Section 41780.

ARTICLE 4. RECYCLING COMPONENT

41070. The city recycling component shall include a program and implementation schedule which shows the methods by which the city will, in combination with the source reduction and composting components, reduce a sufficient amount of solid waste disposed of by the city to comply with the ~~diversion~~ requirements of Section 41780.

ARTICLE 5. COMPOSTING COMPONENT

41200. The city composting component shall include a program and implementation schedule which shows the methods by which the city will, in combination with the source reduction and recycling components, reduce a sufficient amount of solid waste disposed of by the city to comply with the ~~diversion~~ requirements of Section 41780.

Chapter 3. County Source Reduction and Recycling Elements

ARTICLE 2. WASTE CHARACTERIZATION COMPONENT

41333. Any waste characterization component prepared by a county pursuant to Section 41332, and any other information submitted by a county to the board on the quantities of solid waste disposed of, shall include data which is as accurate as practicable, on the quantities of solid waste ~~generated, diverted, and~~ disposed of, to enable the board, to the maximum extent possible, to accurately measure the ~~diversion~~ requirements ~~of paragraph (2) of subdivision (a)~~ of Section 41780.

ARTICLE 3. SOURCE REDUCTION COMPONENT

41350. The county source reduction component shall include a program and implementation schedule which shows the methods by which the county will, in combination with the recycling and composting components, reduce a sufficient amount of solid waste disposed of within the unincorporated area of the county to comply with the ~~diversion~~ requirements of Section 41780.

ARTICLE 4. RECYCLING COMPONENT

41370. The county recycling component shall include a program and implementation schedule which shows the methods by which the county will, in combination with the source reduction and composting components, reduce a sufficient amount of solid waste disposed of within the unincorporated area of the county to comply with the ~~diversion~~ requirements of Section 41780.

ARTICLE 5. COMPOSTING COMPONENT

41400. The county composting component shall include a program and implementation schedule which shows the methods by which the county will, in combination with the source reduction and recycling components, reduce a sufficient amount of solid waste disposed of within the unincorporated area of the county to comply with the ~~diversion~~ requirements of Section 41780.

Chapter 4.5. Nondisposal Facility Elements

ARTICLE 3. REQUIREMENTS

41732. (a) City, county, and regional agency nondisposal facility elements prepared pursuant to Section 41730, 41731, or 41750.1, as the case may be, shall include a description of any new solid waste facilities and the expansion of existing solid waste facilities that will be needed to implement the jurisdiction's source reduction and recycling element and to thereby meet the ~~diversion~~ requirements of Section 41780. The nondisposal facility element may include the identification of specific locations or general areas for new solid waste facilities that will be needed to implement the jurisdiction's source reduction and recycling element.

(b) In complying with the requirements of subdivision (a), the jurisdiction shall utilize the pertinent information that is available to it at the time that the nondisposal facility element is prepared.

Chapter 6. Planning Requirements

ARTICLE 1. WASTE DIVERSION

41780. ~~(a) Each city or county source reduction and recycling element shall include an implementation schedule that shows both of the following:~~

~~(1) For the initial element, the city or county shall divert 25 percent of all solid waste from landfill disposal or transformation by January 1, 1995, through source reduction, recycling, and composting activities.~~

~~(2) Except as provided in Sections 41783, 41784, and 41785, for the first and each subsequent revision of the element, the city or county shall divert 50 percent of all solid waste on and after January 1, 2000, through source reduction, recycling, and composting activities.~~

~~(b) Nothing in this part prohibits a city or county from implementing source reduction, recycling, and composting activities designed to exceed these requirements.~~

(a) Commencing with January 1, 2010, each jurisdiction shall adequately implement the diversion programs set forth in its source reduction and recycling element and household hazardous waste element, including any amendments, revisions, or updates to the element, and any programs set forth in any time extensions, alternative requirements, or compliance orders approved pursuant to this part. The diversion programs shall be designed to reach or exceed the goals set forth in this section and these programs shall be adequate to accomplish this purpose consistent with Section 40051.

(b) The following disposal reduction goals shall apply:

(1) For jurisdictions in counties that disposed of 100,000 tons or more in 2006:

(A) From January 1, 2010 to December 31, 2011, a jurisdiction's annual disposal shall not exceed 2006 disposal.

(B) From January 1, 2012 to December 31, 2019, a jurisdiction's annual disposal shall be reduced by 25% compared to 2006 disposal.

(C) Starting on January 1, 2020, a jurisdiction's annual disposal shall be reduced by 50% compared to 2006 disposal.

(2) Starting on January 1, 2010, a jurisdiction in a county that disposed of less than 100,000 tons in 2006 shall not exceed 2006 disposal levels, as adjusted for economic growth using the percentage change in the Gross Domestic Product of California as published by the U.S. Department of Commerce.

(c) Nothing in this part prohibits a jurisdiction from implementing diversion programs to exceed these requirements.

41780.1. (a) Prior to January 1, 2010, ~~N~~notwithstanding any other requirement of this part, for the purposes of determining the amount of solid waste that a regional agency is required to divert from disposal or transformation through source reduction, recycling, and composting to meet the diversion requirements of Section 41780., the regional agency shall use the solid waste disposal projections in the source reduction and recycling elements of the regional agency's member agencies. The method prescribed in Section 41780.2 shall be used to determine the maximum amount of disposal allowable to meet the diversion requirements of Section 41780.

(b) Notwithstanding any other requirement of this part, for the purposes of determining the amount of solid waste that a city or county is required to divert from disposal or transformation through source reduction, recycling, and composting to meet the diversion requirements of Section 41780, the city or county shall use the solid waste disposal projections in the source reduction and recycling elements of the city or county. The method prescribed in Section 41780.2 shall be used to determine the maximum amount of disposal allowable to meet the diversion requirements of Section 41780.

(c) To determine achievement of the diversion requirements of Section 41780 in 1995 and in the year 2000, projections of disposal amounts from the source reduction and recycling elements shall be adjusted to reflect annual increases or decreases in population and other factors affecting the waste stream, as determined by the board. By January 1, 1994, the board shall study the factors which affect the

generation and disposal of solid waste and shall develop a standard methodology and guidelines to be used by cities, counties, and regional agencies in adjusting disposal projections as required by this section.

(d) The amount of additional diversion required to be achieved by a regional agency to meet the diversion requirements of Section 41780 shall be equal to the sum of the diversion requirements of its member agencies. To determine the maximum amount of disposal allowable for the regional agency to meet the diversion requirements of Section 41780, the maximum amount of disposal allowable for each member agency shall be added together to yield the agency disposable maximum.

(e) This section shall remain in effect only until January 1, 2010 and as of that date is repealed.

41780.2. (a) Prior to January 1, 2010, ~~E~~each city, county, or member agency of a regional agency shall determine the amount of reduction in solid waste disposal and the amount of additional diversion required from the base-year amounts by using the methods set forth in this section.

(b) The city, county, or member agency of a regional agency shall multiply the total amount of base-year solid waste generation, as adjusted using the methods described in subdivision (c) of Section 41780.1, by 0.75 to determine the maximum amount of total disposal allowable in 1995 to meet the diversion requirements of Section 41780.

(c) The city, county, or member agency of a regional agency shall multiply the total amount of base-year solid waste generation, as adjusted using the methods described in subdivision (c) of Section 41780.1, by 0.50 to determine the maximum amount of total disposal allowable in the year 2000 to meet the diversion requirements of Section 41780.

(d) The city, county, or member agency of a regional agency shall multiply the total amount of base-year solid waste generation, as adjusted using the methods described in subdivision (c) of Section 41780.1, by 0.25 to determine the minimum amount of total diversion needed in the year 1995 to meet the diversion requirements of Section 41780.

(e) The city, county, or member agency of a regional agency shall multiply the total amount of base-year solid waste generation, as adjusted using the methods described in subdivision (c) of Section 41780.1, by 0.50 to determine the minimum amount of total diversion needed in the year 2000 to meet the diversion requirements of Section 41780.

(f) The city, county, or member agency of a regional agency shall subtract the total amount of base-year existing diversion from the minimum total diversion required as determined in subdivision (d) or (e) to determine the amount of additional diversion needed to meet the diversion requirements of Section 41780. This amount of additional diversion shall be equal to the minimum amount of additional reduction in disposal amounts which is needed to comply with Section 41780.

(g) This section shall remain in effect only until January 1, 2010, and as of that date is repealed.

41781.~~(a) Except as provided in Sections 41781.1, and 41781.2, for the purpose of determining the base rate of solid waste from which diversion requirements shall be calculated, "solid waste" includes only the following:~~

~~(1) The amount of solid waste generated within a local agency's jurisdiction, the types and quantities of which were disposed of at a permitted disposal facility as of January 1, 1990. Nothing in this section requires local agencies to perform waste characterization in addition to the waste characterization requirements established under Sections 41030, 41031, 41330, 41331, and 41332.~~

~~(2) The amount of solid waste diverted from a disposal facility or transformation facility through source reduction, recycling, or composting.~~

~~(b) For the purposes of this section, "solid waste" does not include any solid waste which would not normally be disposed of at a disposal facility.~~

~~(c) For the purposes of this chapter, the amount of solid waste from which the required reductions are measured shall be the amount of solid waste existing on January 1, 1990, with future adjustments for increases or decreases in the quantity of waste caused only by changes in population or changes in the number or size of~~

~~governmental, industrial, or commercial operations in the jurisdiction.~~

(a) The disposal reduction requirements of section 41780 shall be measured by comparing a jurisdiction's base tonnage of solid waste disposed during calendar year 2006 to a jurisdiction's annual disposal in subsequent years.

(b) For 2006 and subsequent years, a jurisdiction's disposal shall include only solid waste disposed at landfills and transformation facilities as reported pursuant to section 41821.5

(c) The board shall determine the base tonnage of solid waste disposed of by each jurisdiction for calendar year 2006 pursuant to section 41821.5.

(d) The board shall determine the tonnage of solid waste disposed of by each jurisdiction annually thereafter pursuant to section 41821.5.

41781.1. (a) Prior to January 1, 2010, in determining ~~that~~whether the diversion of sludge may be counted toward the diversion requirements established under Section 41780, but within 180 days of receiving such a request, the board shall do both of the following:

(1) Make a finding at a public hearing, based upon substantial evidence, that the sludge has been adequately analyzed and will not pose a threat to public health or the environment for the reuse which is proposed.

(A) Except as provided in subparagraph (B), prior to making the finding required to be made pursuant to this paragraph, the board shall consult with each of the following agencies, and obtain their concurrence in the finding, to the extent of each agency's jurisdiction over the sludge or its intended reuse:

(i) The state water board and the regional water boards.

(ii) The State Department of Health Services.

(iii) The State Air Resources Board and air pollution control districts and air quality management districts.

(iv) The Department of Toxic Substances Control.

(B) If, prior to the board making the finding required to be made pursuant to this paragraph, an agency specified in subparagraph (A) issues a permit, waste discharge requirements, or imposes other conditions for the reuse of sludge, the agency shall have been deemed to have concurred in that finding.

(2) Establish, or ensure that one or more of the agencies specified in subparagraph (A) of paragraph (1) establishes, ongoing monitoring requirements which ensure that the proposed sludge reuse does not pose a threat to health and safety or the environment.

(b) It is not the intent of this section to require the board, or the agencies listed in subparagraph (A) of paragraph (1) of subdivision (a), to impose additional requirements or approval procedures for sludge or sludge reuse applications, apart from the requirements and approval procedures already imposed by state and federal law. It is the intent of this section to require that the board determine that each sludge diversion, for which diversion credit is sought, meets all applicable requirements of state and federal law, and thereby provides for maximum protection of the public health and safety and the environment.

(c) This section shall remain in effect only until January 1, 2010, and as of that date is repealed.

41781.2. (a) (1) It is the intent of the Legislature in enacting this section not to require cities, counties, and regional agencies to revise source reduction and recycling elements prior to their submittal to the board for review and approval, except as the elements would otherwise be required to be revised by the board pursuant to this part. Pursuant to Sections 41801.5 and 41811.5, compliance with this section shall be determined by the board when source reduction and recycling elements are submitted to the board pursuant to Section 41791.5. However, any city or county may choose to revise its source reduction and recycling element or any of its components prior to board review of the source reduction and recycling element for the purpose of complying with this section.

(2) It is further the intent of the Legislature in enacting this section to ensure that compliance with the diversion requirements of Section 41780 shall be accurately determined based upon a correlation between solid waste which was disposed of at permitted disposal facilities and diversion claims which are subsequently made for that solid waste.

(b) For the purposes of this section, the following terms have the following meaning:

(1) "Action by a city, county, regional, or local governing body" means franchise or contract conditions, rate or fee schedules, zoning or land use decisions, disposal facility permit conditions, or activities by a waste hauler, recycler, or disposal facility operator acting on behalf of a city, county,

regional agency, or local governing body, or other action by the local governing body if the local government action is specifically related to the claimed diversion.

(2) "Scrap metal" includes ferrous metals, nonferrous metals, aluminum scrap, other metals, and auto bodies, but does not include aluminum cans, steel cans, or bimetal cans.

(3) "Inert solids" includes rock, concrete, brick, sand, soil, fines, asphalt, and unsorted construction and demolition waste.

(4) "Agricultural wastes" includes solid wastes of plant and animal origin, which result from the production and processing of farm or agricultural products, including manures, orchard and vineyard prunings, and crop residues, which are removed from the site of generation for solid waste management. Agriculture refers to SIC Codes 011 to 0291, inclusive.

(c) Prior to January 1, 2010, ~~I~~for purposes of determining the base amount of solid waste from which the diversion requirements of this article shall be calculated, "solid waste" does not include the diversion of agricultural wastes; inert solids, including inert solids used for structural fill; discarded, white-coated, major appliances, and scrap metals; unless all of the following criteria are met:

(1) The city, county, or regional agency demonstrates that the material was diverted from a permitted disposal facility through an action by the city, county, or regional agency which specifically resulted in the diversion.

(2) The city, county, or regional agency demonstrates that, prior to January 1, 1990, the solid waste which is claimed to have been diverted was disposed of at a permitted disposal facility in the quantity being claimed as diversion. If historical disposal data is not available, that demonstration may be based upon information available to the city, county, or regional agency which substantiates a reasonable estimate of disposal quantities which is as accurate as is feasible in the absence of historical disposal data.

(3) The city, county, or regional agency is implementing, and will continue to implement, source reduction, recycling, and composting programs, as described in its source reduction and recycling element.

(d) If a city, county, or regional agency source reduction and recycling element submitted pursuant to this chapter includes the diversion of any of the wastes specified in subdivision (c) for years preceding the year commencing January 1, 1990, that diversion shall not apply to the diversion requirements of Section 41780, unless the criteria in subdivision (c) are met.

(e) If a city, county, or regional agency source reduction and recycling element submitted pursuant to this chapter does not contain information sufficient for the city, county, or regional agency to demonstrate to the board whether the criteria in subdivision (c) have been met, the city, county, or regional agency may provide additional information following board review of the source reduction and recycling element pursuant to Section 41791.5. In providing the additional information, Sections 41801.5 and 41811.5 shall apply.

(f) In demonstrating whether the requirements of paragraph (1) of subdivision (c) have been met, the city, county, or regional agency shall submit information to the board on local government programs which are specifically related to the claimed diversion.

(g) Notwithstanding any other provision of law, for purposes of determining the base amount of solid waste from which the diversion requirements of this article shall be calculated for a city, county, or regional agency which includes biomass conversion in its source reduction and recycling element pursuant to Section 41783.1, the base amount shall include those materials disposed of in the base year at biomass conversion facilities.

(h) This section shall remain in effect only until January 1, 2010, and as of that date is repealed.

41782. (a) The board may make adjustments to the amounts reported pursuant to subdivisions (a) and (c) of Section 41821.5, if the city, county, or regional agency demonstrates, and the board concurs, based on substantial evidence in the record, that achievement of the ~~diversion~~ requirements of Section 41780 is not feasible due to either of the following circumstances:

(1) A medical waste treatment facility, as defined in subdivision (a) of Section 25025 of the Health and Safety Code, accepts untreated medical waste, which was generated outside of the jurisdiction, for purposes of treatment, and the medical waste, when treated, becomes solid waste.

(2) (A) A regional diversion facility within the jurisdiction accepts material generated outside the jurisdiction and the conversion or processing of that material results in the production of residual solid waste that cannot feasibly be diverted. Any adjustment provided pursuant to this paragraph shall apply only to that portion of the residual solid waste produced as a consequence of processing material that is not subject to the reporting requirements of subdivisions (a) and (c) of Section 41821.5 and that cannot feasibly be allocated to the originating jurisdiction.

(B) For purposes of granting the reduction specified in subparagraph (A) and for the purpose of calculating compliance with the ~~diversion~~ requirements of Section 41780, "regional diversion facility" means a facility which meets all of the following criteria:

(1) The facility accepts material for recycling from both within and without the jurisdiction of the city or county within which it is located.

(2) All material accepted by the facility has been source-separated for the purpose of being processed prior to its arrival at the facility.

(3) The residual solid waste generated by the facility is a byproduct of the recycling that takes place at the facility.

(4) The facility is not a solid waste facility or solid waste handling operation pursuant to Section 43020.

(5) The facility contributes to regional efforts to divert solid waste from disposal.

(b) If the board makes an adjustment pursuant to subdivision (a), the ~~annual~~ report required pursuant to Section 41821 by the jurisdiction, within which a medical waste treatment facility or regional diversion facility described in subdivision (a) is located, shall include all of the following information:

(1) The total amount of residual solid waste produced at the facility.

(2) The waste types and amounts in the residual solid waste that cannot feasibly be diverted.

(3) The factors that continue to prevent the waste types from being feasibly diverted.

(4) Any changes since the petition for adjustment was granted or since the last annual report.

(5) The additional efforts undertaken by the jurisdiction to divert the waste produced at the facility.

(c) Based upon the information submitted pursuant to subdivision (b), if the board finds, as part of the biennial review pursuant to Section 41825, that the residual solid waste that previously could not be diverted can now be diverted, the board shall rescind the adjustment commensurate with the amount of diversion of the residual tonnages.

(d) It is not the intent of the Legislature to exempt any solid waste facility or handling operation from periodic tracking and the reporting of disposal tonnages in accordance with the regulations adopted by the board pursuant to subdivisions (a) and (c) of Section 41821.5, or from the permitting requirements pursuant to Section 43020.

41786. (a) Notwithstanding Section 41780, the board may ~~reduce~~ modify the ~~diversion~~ requirements specified in Section 41780 for any city or county which, on or before January 1, 1990, disposed of 75 percent or more of its solid waste, collected by the jurisdiction or its authorized agents or contractors, by transformation if either of the following conditions exist:

(1) The attainment of the ~~25 percent or 50 percent diversion~~ requirements specified in Section 41780 will result in substantial impairment of the obligations of one or more contracts in existence on January 1, 1990, for the city or county to furnish solid waste for fuel. A substantial impairment of obligations includes, but is not limited to, instances where a city has entered into a contract or franchise for 20 or more years with a joint powers authority for the operation of a transformation facility, and meeting the ~~diversion~~ requirements of Section 41780 may increase the city's costs by 15 percent or more.

(2) The attainment of the ~~25 percent or 50 percent diversion~~ requirements specified in Section 41780 will substantially interfere with the repayment of debt incurred to finance or refinance the transformation project, if the refinancing is done for the purpose of reducing debt service and not for the expansion of the transformation project.

(b) If the board ~~reduces~~ modifies the ~~diversion~~ requirements for a city or county pursuant to subdivision (a), the board shall establish new ~~diversion~~ requirements which require the maximum feasible amount of source reduction, recycling, and composting but which will not result in the conditions described in paragraphs (1) and (2) of subdivision (a).

ARTICLE 1.5. RURAL ASSISTANCE

41787. (a) (1) The board may reduce the ~~diversion~~ requirements of Section 41780 for a rural city if the rural city demonstrates, and the board concurs, based on substantial evidence in the record, that achievement of the ~~diversion~~ requirements is not feasible due to both of the following conditions:

(A) The small geographic size or low population density of the rural city.

(B) The small quantity of solid waste generated within the rural city.

(2) The board may reduce the ~~diversion~~ requirements of Section 41780 for the unincorporated area of a rural county if the rural county demonstrates, and the board concurs, based on substantial evidence in

the record, that achievement of the ~~diversion~~ requirements is not feasible due to both of the following conditions:

(A) The large geographic size or low population density of the rural county.

(B) The small quantity of solid waste generated within the rural county.

(3) The board may grant a reduction in ~~diversion~~ requirements pursuant to this subdivision only if the rural city or the rural county demonstrates to the board, and the board concurs, based on substantial evidence in the record, that it has, at a minimum, implemented all of the following programs:

(A) A source reduction and recycling program designed to handle the predominant classes and types of solid waste generated within the rural city or rural county.

(B) A public sector diversion and procurement program.

(C) A public information and education program.

(b) If, as part of the review performed pursuant to Section 41825, the board finds that a rural city or a rural county, which previously qualified for a reduction in ~~diversion~~ requirements pursuant to subdivision (a), is no longer eligible for that reduction, the board shall issue an order requiring the rural city or rural county to comply with the ~~diversion~~ requirements of Section 41780.

41787.1. (a) Rural cities and rural counties may join to form rural regional agencies pursuant to Article 3 (commencing with Section 40970) of Chapter 1.

(b) A rural regional agency, and not the rural cities or rural counties which are member jurisdictions of the rural regional agency, may be responsible for compliance with Article 1 (commencing with Section 41780) of Chapter 6 if specified in the agreement pursuant to which the rural regional agency is formed.

(c) (1) The board may reduce the ~~diversion~~ requirements of Section 41780 for a rural regional agency, if the rural regional agency demonstrates, and the board concurs, based on substantial evidence in the record, that achievement of the ~~diversion~~ requirements is not feasible because adverse market or economic conditions beyond the control of the rural regional agency prevent it from meeting the requirements of Section 41780.

(2) Before a rural regional agency may be granted a reduction in ~~diversion~~ requirements pursuant to paragraph (1), it shall demonstrate that, at a minimum, it has established all of the following regionwide programs:

(A) A source reduction and recycling program or programs designed to handle the predominant classes and types of solid waste generated within the rural regional agency.

(B) A regional diversion and procurement program or programs.

(C) A regional public information and education program or programs.

(d) (1) Notwithstanding Section 40974, any civil penalty imposed on a rural regional agency by the board pursuant to Section 41813 or 41850 shall be imposed only on a member rural city or county that is in violation of this division as a city or county irrespective of its membership in the rural regional agency. If a rural regional agency elects to apportion penalties pursuant to this subdivision, the member jurisdiction to that rural regional agency shall, as a condition of the agreement establishing the rural regional agency, be required to account on an individual jurisdictional basis for their compliance with the ~~diversion~~ requirements of Section 41780, as prescribed by Section 41780.2.

(2) In determining whether to impose a penalty on a member of a rural regional agency pursuant to this subdivision, the board may consider all of the following:

(A) The relevant circumstances that resulted in the agency's failure to achieve the ~~diversion~~ requirements of paragraphs (1) and (2) of subdivision (a) of Section 41780, and whether the member contributed to the circumstances that resulted in the failure to achieve the ~~diversion~~ requirements.

(B) Whether the agency's joint powers agreement specifies that all liability for fines and penalties rests with the member, with no liability assigned to the agency.

(C) Whether the imposition of penalties on members and not on the agency would provide for flexibility that would allow the agency to resolve the problem that is preventing the members from meeting the ~~diversion~~ requirements.

(D) Limiting penalties to a maximum of ten thousand dollars ($10,000) per day if a member's failure does not cause other members or the agency to fail to implement programs in the agency's source reduction and recycling element.

41787.2. (a) Prior to January 1, 2010, ~~A~~a rural city or a rural county, which has received, or is eligible for, a reduction in diversion requirements pursuant to Section 41787, may become a member of a rural regional agency for the purpose of complying with the diversion requirements of Section 41780, in which case the region's maximum disposal tonnage allowable shall be calculated as follows:

(1) Determining the regional maximum disposal tonnage allowable, excluding members with reduced diversion requirements.

(2) Determining the maximum disposal tonnage allowable for those members authorized to meet reduced diversion requirements.

(3) Adding the calculated maximum disposal tonnages determined pursuant to paragraphs (1) and (2) to determine the regional maximum disposal tonnage allowable.

(b) (1) A rural regional agency may not assume responsibility for compliance with diversion requirements upon formation pursuant to subdivision (b) of Section 41787.1, and for compliance with Article 1 (commencing with Section 41780), if the rural regional agency is comprised of more than two rural counties, unless authorized by the board pursuant to paragraph (2).

(2) The board may authorize the assumption of responsibility for compliance with the diversion requirements by a rural regional agency upon formation, which is comprised of more than two rural counties, if the board finds that the rural regional agency's assumption of responsibility will not adversely affect compliance with this part.

(c) This section shall remain in effect only until January 1, 2010, and as of that date is repealed.

41787.4. Prior to January 1, 2010, ~~N~~notwithstanding Section 41820, the board may grant a two-year time extension from the diversion requirements of Section 41780 to a rural city, rural county, or rural regional agency if all of the following conditions are met:

(a) The board adopts written findings, based on substantial evidence in the record, that adverse market or economic conditions beyond the control of the rural city, rural county, or rural regional agency prevent the rural city, rural county, or rural regional agency from meeting the diversion requirements.

(b) The rural city, rural county, or rural regional agency submits a plan of correction that demonstrates how it will meet the diversion requirements before the time extension expires, which includes the source reduction, recycling, and composting programs it will implement and states how those programs will be funded.

(c) The rural city, rural county, or rural regional agency demonstrates that it is achieving the maximum feasible amount of source reduction, recycling, or composting of solid waste within its jurisdiction.

(d) This section shall remain in effect only until January 1, 2010, and as of that date is repealed.

Chapter 7. Approval of Local Planning

ARTICLE 1. BOARD APPROVAL

41801. Before approving or conditionally approving a countywide or regional integrated waste management plan, or any element of the plan, pursuant to Section 41800, the board shall adopt written findings, based on substantial evidence in the record, that implementing the plan or element will achieve the requirements established pursuant to this part, including the ~~diversion~~ requirements of Section 41780.

41801.5. (a) Prior to January 1, 2010, ~~I~~if an element submitted to the board for final review includes the diversion of any solid wastes specified in subdivision (c) of Section 41781.2 for years preceding the year commencing January 1, 1990, and the board is unable to determine whether the requirements of Section 41781.2 have been met, the board shall notify the city, county, or regional agency that the diversion is excluded for purposes of calculating compliance with Section 41780. The board shall notify the city, county, or regional agency of the exclusion within 60 days from the date of receipt of the element for final review. If an element has been submitted to the board for final review prior to January 1, 1993, the board shall notify the submitting city, county, or regional agency of the exclusion on or before March 1, 1993.

(b) The notice shall be based upon a summary review undertaken solely for the purpose of determining whether the source reduction and recycling element includes any diversion of wastes excluded by Section 41781.2, and whether the element contains information sufficient for the board to determine whether the requirements of that section have been met. The summary review and notice shall be undertaken by the board concurrent with the board's review and approval, conditional approval, or disapproval of source reduction and recycling elements pursuant to Section 41800.

(c) The board shall approve or conditionally approve the source reduction and recycling element, if wastes have been excluded pursuant to Section 41781.2, if the board finds, pursuant to Section 41801, that,

notwithstanding that exclusion, the element will achieve the requirements established pursuant to this part, including the diversion requirements of Section 41780.

(d) If the source reduction and recycling element is approved or conditionally approved pursuant to this section, the city, county, or regional agency shall revise the element to reflect the excluded wastes and shall submit any such revisions to the board pursuant to Section 41822.

(e) This section shall remain in effect only until January 1, 2010, and as of that date is repealed.

ARTICLE 2. DEFICIENCIES

41811.5. (a) Prior to January 1, 2010, ~~I~~if the board disapproves an element for which a city, county, or regional agency has received a notification of excluded wastes pursuant to Section 41801.5, the city, county, or regional agency may, concurrent with the procedures specified in Section 41811, submit additional information to substantiate that the requirements of Section 41781.2 have been met. The additional information shall be submitted to the board within 60 days of disapproval of the element.

(b) Following the receipt of additional information pursuant to subdivision (a) the board shall determine, within 60 days, whether all, or a portion of, the excluded waste will be included in the source reduction and recycling element for purposes of calculating compliance with Section 41780.

(c) Based upon the board's determination pursuant to subdivision (b), the city, county, or regional agency shall revise its source reduction and recycling element to correct any deficiencies resulting from the exclusion of wastes pursuant to Section 41781.2, and shall resubmit the element to the board. The element shall be resubmitted within 120 days of a board determination pursuant to subdivision (b). Notwithstanding Section 41811, if an element is disapproved pursuant to Section 41800, and the notice of deficiency issued pursuant to Section 41810 identifies reasons for disapproval, including, but not limited to, noncompliance with Section 41781.2, the city, county, or regional agency shall correct all deficiencies, and readopt and resubmit the element to the board pursuant to the requirements of this section.

(d) In revising the source reduction and recycling element to address deficiencies arising from noncompliance with Section 41781.2, a city, county, or regional agency may limit the revisions to an identification and description of the specific measures that will be undertaken to achieve compliance with Section 41780.

(e) If a city, county, or regional agency is unable to resubmit the source reduction and recycling element within 120 days, the board may, on a case-by-case basis, extend the deadline imposed by subdivision (c) for submittal of a revised element.

(f) This section shall remain in effect only until January 1, 2010, and as of that date is repealed.

ARTICLE 3. OTHER PROVISIONS

41820.6. (a) In addition to its authority under Section 41820, the board may, after a public hearing, grant a time extension from the ~~diversion~~ requirements of Section 41780 to a city if both of the following conditions exist:

(1) The city was incorporated pursuant to Division 3 (commencing with Section 56000) of Title 5 of the Government Code on or after January 1, 2001.

(2) The county within which the city is located did not include provisions in its franchises that ensured that the now incorporated area would comply with the ~~diversion~~ requirements of Section 41780.

(b) The board may authorize a city that meets the requirements of subdivision (a) to submit a source reduction and recycling element that includes an implementation schedule that shows that the city shall ~~divert 50 percent of its estimated generation amount of solid waste from landfill or transformation facilities~~ meet the requirements of Section 41780, within three years from the date on which the source reduction and recycling element is due pursuant to subdivision (b) of Section 41791.5, through source reduction, recycling, and composting activities.

~~41821. (a) (1) Each year following the board's approval of a city, county, or regional agency's source reduction and recycling element, household hazardous waste element, and nondisposal facility element, the city, county, or regional agency shall submit a report to the board summarizing its progress in reducing solid waste as required by Section 41780.~~

~~(2) The annual report shall be due on or before August 1 of the year following board approval of the source reduction and recycling element, the household hazardous waste element, and the nondisposal facility element, and on or before August 1 in each subsequent year. The information in this report shall encompass the previous calendar year, January 1 to December 31, inclusive.~~

~~(b) Each jurisdiction's annual report to the board shall, at a minimum, include the following:~~

~~(1) Calculations of annual disposal reduction.~~

~~(2) Information on the changes in waste generated or disposed of due to increases or decreases in population, economics, or other factors in complying with subdivision (c) of Section 41780.1.~~

~~(3) A summary of progress made in implementing the source reduction and recycling element and the household hazardous waste element. The city, county, or regional agency may also include information about existing and new programs it is implementing that are not part of the original or modified source reduction and recycling element adopted by the jurisdiction and approved by the board to achieve the diversion requirements of Section 41780.~~

~~(4) A summary of progress made in diversion of construction and demolition of waste material, including information on programs and ordinances implemented by the local government and quantitative data, where available.~~

~~(5) If the jurisdiction has been granted a time extension by the board pursuant to Section 41820, the jurisdiction shall include a summary of progress made in meeting the source reduction and recycling element implementation schedule pursuant to paragraph (2) of subdivision (a) of Section 41780 and complying with the jurisdiction's plan of correction, prior to the expiration of the time extension.~~

~~(6) If the jurisdiction has been granted an alternative source reduction, recycling, and composting requirement pursuant to Section 41785, the jurisdiction shall include a summary of progress made towards meeting the alternative requirement as well as an explanation of current circumstances that support the continuation of the alternative requirement.~~

~~(7) Other information relevant to compliance with Section 41780.~~

~~(c) A jurisdiction may also include, in the report required by this section, all of the following:~~

~~(1) Any factor that the jurisdiction believes would affect the accuracy of the estimated waste disposal reduction calculation provided in the report pursuant to paragraph (1) of subdivision (b) to accurately reflect the changes in the amount of solid waste that is actually disposed. The jurisdiction may include, but is not limited to including, all of the following factors:~~

~~(A) Whether the jurisdiction hosts a solid waste facility.~~

~~(B) The effects of self-hauled waste and construction and demolition waste.~~

~~(C) The original or subsequent base year calculation, the amount of orphan waste, and the waste disposal reduction adjustment methodology.~~

~~(2) Information regarding the programs the jurisdiction is undertaking to respond to the factors specified in paragraph (1), and why it is not feasible to implement programs to respond to other factors that affect the amount of waste that is disposed.~~

~~(3) An estimate that the jurisdiction believes reflects that jurisdiction's annual reduction or increase in the disposal of solid~~

~~waste.~~

~~(d) The board shall use, but is not limited to the use of, the annual report in the determination of whether the jurisdiction's source reduction and recycling element needs to be revised.~~

~~(e) (1) The board shall adopt procedures for requiring additional information in a jurisdiction's annual report. The procedures shall require the board to notify a jurisdiction of any additional required information no later than 120 days after the board receives the report from the jurisdiction.~~

~~(2) Paragraph (1) does not prohibit the board from making additional requests for information in a timely manner. A jurisdiction receiving a request for information shall respond in a timely manner.~~

~~(f) The board shall adopt procedures for conferring with a jurisdiction regarding the implementation of a diversion program or changes to a jurisdiction's calculation of its annual disposal reduction.~~

(a)If the board found a jurisdiction in compliance with Section 41780 for calendar year 2006, then on or before September 2013, and on or before September 1 every four years thereafter, a jurisdiction shall submit a report that encompasses the previous four calendar years from January1to December 31, inclusive to the board.

(b) If the board did not find a jurisdiction in compliance with Section 41780 for calendar year 2006, then on or before September 1, 2011, and on or before September 1 every two years thereafter, a jurisdiction shall submit a report that encompasses the previous two calendar years from January 1 to December 31, inclusive, to the board

(c) The report to the board shall include all of the following information:

(1) A summary of the jurisdiction's implementation of diversion programs set forth in its source reduction and recycling element and the programs set forth in its household hazardous waste element.

(2) An update of the jurisdiction's source reduction and recycling element and household hazardous waste element to include any new or expanded programs the jurisdiction has implemented or plans to implement.

(3) An update of the jurisdiction's nondisposal facility element to reflect all new or expanded nondisposal facilities the jurisdiction is using or planning to use.

(4) A summary of progress made in diversion of construction and demolition of waste material, including information on programs and ordinances implemented by the local government and quantitative data, where available.

(d) In addition to the requirements listed above, the report may include the following:

(1) any information on disposal reported pursuant to section 41821.5 that the jurisdiction believes may be relevant to the board’s determination of whether or not the jurisdiction has met the disposal reduction requirements of section 41780(b).

(2) any disposal characterization studies or other studies done that show the effectiveness of the programs being implemented.

(3) any factors that the jurisdiction believes would affect the accuracy of, or mitigate the amount of, solid waste disposed by the jurisdiction including, but is not limited to:

(A) Whether the jurisdiction hosts a solid waste facility or diversion facility.

(B) The effects of self-hauled waste and construction and demolition waste.

(4) Information regarding any programs the jurisdiction is undertaking to address specific disposal challenges and why it is not feasible to implement programs to respond to other factors that affect the amount of waste disposed.

(5) Other information describing the good faith efforts of the jurisdiction.

(e) The board shall use, but is not limited to the use of, the-progress report in the determination of whether the jurisdiction’s source reduction and recycling element needs to be updated.

(f) (1) The board shall adopt procedures for requiring additional information in a jurisdiction's progress report. The procedures shall require the board to notify a jurisdiction of any additional required information no later than 120 days after the board receives the report from the jurisdiction.

(2) Paragraph (1) does not prohibit the board from making additional requests for information in a timely manner. A jurisdiction receiving a request for information shall respond in a timely manner.

(g) The board shall adopt procedures for conferring with a jurisdiction regarding the implementation of a diversion programs.

(h) Notwithstanding the Uniform Electronic Transactions Act, the progress report shall be submitted electronically using the board's electronic reporting format system.

ARTICLE 4. REVIEW AND ENFORCEMENT

41825. ~~(a) At least once every two years, the board shall review each city, county, or regional agency source reduction and recycling element and household hazardous waste element.~~

~~(b) If after a public hearing, which, to the extent possible, is held in the local or regional agency's jurisdiction, the board finds that the city, county, or regional agency has failed to implement its source reduction and recycling element or its household hazardous waste element, the board shall issue an order of compliance with a specific schedule for achieving compliance. The compliance order shall include those conditions that the board determines to be necessary for the local agency or regional agency to complete in order to implement its source reduction and recycling element or household hazardous waste element.~~

~~(c) (1) The board shall confer with a jurisdiction regarding conditions relating to a proposed order of compliance, with a first meeting occurring not less than 60 days before issuing a notice of intent to issue an order of compliance.~~

~~(2) The board shall issue a notice of intent to issue an order of compliance not less than 30 days before the board holds a hearing to issue the notice of compliance. The notice of intent shall specify all of the following:~~

~~(A) The proposed basis for issuing an order of compliance.~~

~~(B) Proposed actions that board staff recommends are necessary for the jurisdiction to complete in order to implement its source reduction and recycling element or household hazardous waste element.~~

~~(C) Proposed staff recommendations to the board.~~

~~(3) The board shall consider any information provided pursuant to subdivision (c) of Section 41821 if the proposed issuance of an order of compliance involves changes to a jurisdiction's calculation of annual disposal reduction.~~

(a) If the board found a jurisdiction in compliance with Section 41780 for calendar year 2006, then at least every four years commencing in January 2013, the board shall review each jurisdiction source reduction and recycling element and household hazardous waste element.

(b) If the board did not find a jurisdiction in compliance with Section 41780 for calendar year, then at least once every two years commencing in 2011, the board shall review each jurisdiction source reduction and recycling element and household hazardous waste element.

(c)For the purposes of this section, "good faith effort" means all reasonable and feasible efforts by a jurisdiction to implement those programs or activities identified in its source

reduction and recycling element or household hazardous waste element, or alternative programs or activities that achieve the same or similar results.

(d) The board shall consider the following when considering whether a jurisdiction has made a good faith effort to implement its source reduction and recycling element or its household hazardous waste element:

(1) Natural disasters.

(2) Budgetary conditions within a jurisdiction that could not be remedied by the imposition or adjustment of solid waste fees.

(3) Work stoppages that directly prevent a jurisdiction from implementing its source reduction and recycling element or household hazardous waste element.

(4) The impact of the failure of federal, state, and other local agencies located within the jurisdiction to implement source reduction and recycling programs in the jurisdiction.

(5) The extent to which a jurisdiction has implemented additional source reduction, recycling, and composting activities.

(6) The extent to which the jurisdiction is implementing programs to prevent an increase in countywide disposal as compared to the base tonnage year.

(7) Whether a local jurisdiction has provided information to the board concerning whether construction and demolition waste material is at least a moderately significant portion of the waste stream, and, if so, whether the local jurisdiction has adopted an ordinance for diversion of construction and demolition waste materials from solid waste disposal facilities, has adopted a model ordinance pursuant to subdivision (a) of Section 42912 for diversion of construction and demolition waste materials from solid waste disposal facilities, or has implemented another program to encourage or require diversion of construction and demolition waste materials from solid waste disposal facilities.

(8) For purposes of this section "good faith effort" may also include the evaluation by a jurisdiction of improved technology for the handling and management of solid waste that would reduce costs, improve efficiency in the collection, processing, or marketing of recyclable materials or yard waste, and enhance the ability of the jurisdiction to adequately address all sources of significant disposal and the jurisdiction has submitted a compliance schedule (pursuant to Section 41825,)and has made all other reasonable and feasible efforts to implement the programs identified in its source reduction and recycling element or household hazardous waste element.

(9) In determining whether a jurisdiction has made a good faith effort, the board shall consider the enforcement criteria included in its enforcement policy, as adopted on April 25, 1995, or as subsequently amended.

(e) If after a public hearing, which, to the extent possible, is held in the local or regional agency's jurisdiction, the board finds that the jurisdiction has failed to make a good faith effort to implement its source reduction and recycling element or its household hazardous waste element, the board shall initate the process to issue an order of compliance with a specific schedule for achieving compliance.

(ef) (1) The board shall confer with a jurisdiction regarding conditions relating to a proposed order of compliance, with a first meeting occurring not less than 60 days before issuing a notice of intent to issue an order of compliance.

(2) The board shall issue a notice of intent to issue an order of compliance not less than 30 days before the board holds a hearing to issue the notice of compliance. The notice of intent shall specify all of the following:

(A) The proposed basis for issuing an order of compliance.

(B) Proposed actions that board staff recommends are necessary for the jurisdiction to complete in order to implement its source reduction and recycling element or household hazardous waste element.

(C) Proposed staff recommendations to the board.

(3) The board shall consider any information provided pursuant to section 41821 if the proposed issuance of an order of compliance involves changes to a jurisdiction's calculation of annual disposal reduction.

(g) The board may issue a compliance order only if the board determines that the jurisdiction has failed to make a good faith effort to implement its source reduction and recycling element, including updates, or its household hazardous waste element, including updates and has determined that additional program implementation is necessary to adequately address all significant sources of disposal.

(1) In making a determination, the board may consider jurisdiction disposal reduction progress only as an indication of whether the jurisdiction adequately implemented its diversion programs but shall not consider this fact to be determinative as to whether the jurisdiction has failed to make a good faith effort to implement its source reduction and recycling element or its household hazardous waste element.

(h) In addition to considering the good faith efforts to implement a diversion program, the board shall consider all of the following factors in determining whether or not to issue a compliance order:

(A) The rural nature of the jurisdiction.

(B) Whether exceptional growth rate that may have affected compliance.

(C) Other information that the jurisdiction may provide that indicates the effectiveness of the jurisdiction's programs, such as disposal characterization studies, or other jurisdiction-specific information.

(i) The compliance order shall include those conditions that the board determines to be necessary for the jurisdiction to complete in order to implement its source reduction and recycling element or household hazardous waste element.

ARTICLE 5. ENFORCEMENT

41850. (a) Except as specifically provided in Section 41813, if, after holding the public hearing and issuing an order of compliance pursuant to Section 41825, the board finds that the ~~city, county, and regional agency~~ jurisdiction has failed to make a good faith effort to implement its source reduction and recycling element or its household hazardous waste element, the board may impose administrative civil penalties upon the city or county or, pursuant to Section 40974, upon the city or county as a member of a regional agency, of up to ten thousand dollars ($10,000) per day until the ~~city, county, and regional agency~~ jurisdiction implements the element.

(b) In determining whether or not to impose any penalties, or in determining the amount of any penalties imposed under this section, including any penalties imposed due to the exclusion of solid waste pursuant to Section 41781.2 that results in a reduction in the quantity of solid waste diverted by a ~~city, county, and regional agency~~ jurisdiction, the board shall consider whether the jurisdiction has made a good faith effort to implement its source reduction and recycling element or its household hazardous waste element. In addition, the board shall consider only those relevant circumstances that have prevented a ~~city, county, and regional agency~~ jurisdiction from meeting the requirements of this division, including the ~~diversion~~ requirements of ~~paragraphs (1) and (2) of subdivision (a) of~~ Section 41780, including, but not limited to, all of the following:

(1) Natural disasters.

(2) Budgetary conditions within a ~~city, county, and regional agency~~ jurisdiction that could not be remedied by the imposition or adjustment of solid waste fees.

(3) Work stoppages that directly prevent a ~~city, county, and regional agency~~ jurisdiction from implementing its source reduction and recycling element or household hazardous waste element.

(4) The impact of the failure of federal, state, and other local agencies located within the jurisdiction to implement source reduction and recycling programs in the jurisdiction on the host jurisdiction's ability to meet the requirements of paragraph (2) of subdivision (a) of Section 41780.

(c) In addition to the factors specified in subdivision (b), the board shall consider all of the following:

(1) The extent to which a ~~city, county, and regional agency~~ jurisdiction has implemented additional source reduction, recycling, and composting activities to comply with the ~~diversion~~ requirements of ~~paragraphs (1) and (2) of subdivision (a) of~~ Section 41780.

(2) The extent to which a ~~city, county, and regional agency~~ jurisdiction is meeting the ~~diversion~~ requirements of ~~paragraphs (1) and (2) of subdivision (a) of~~ Section 41780.

(3) Whether the jurisdiction has requested and been granted an extension to the requirements of Section 41780, pursuant to Section 41820, or an alternative requirement to Section 41780, pursuant to Section 41785.

(4) Whether a local jurisdiction has provided information to the board concerning whether construction and demolition waste material is at least a moderately significant portion of the waste stream, and, if so, whether the local jurisdiction has adopted an ordinance for diversion of construction and demolition waste materials from solid waste disposal facilities, has adopted a model ordinance pursuant to subdivision (a) of Section 42912 for diversion of construction and demolition waste materials from solid waste disposal facilities, or has implemented another program to encourage or require diversion of construction and demolition waste materials from solid waste disposal facilities.

(d) (1) For the purposes of this section, "good faith effort" means all reasonable and feasible efforts by a ~~city, county, and regional agency~~ jurisdiction to implement those programs or activities identified in its source reduction and recycling element or household hazardous waste element, or alternative programs or activities that achieve the same or similar results.

(2) For purposes of this section "good faith effort" may also include the evaluation by a ~~city, county, and regional agency~~ jurisdiction of improved technology for the handling and management of solid waste that would reduce costs, improve efficiency in the collection, processing, or marketing of recyclable materials or yard waste, and enhance the ability of the ~~city, county, and regional agency~~ jurisdiction to meet the ~~diversion~~ requirements of ~~paragraphs (1) and (2) of subdivision (a) of~~ Section 41780, provided that the ~~city, county, and regional agency~~ jurisdiction has submitted a compliance schedule pursuant to Section 41825, and has made all other reasonable and feasible efforts to implement the programs identified in its source reduction and recycling element or household hazardous waste element.

(3) In determining whether a jurisdiction has made a good faith effort, the board shall consider the enforcement criteria included in its enforcement policy, as adopted on April 25, 1995, or as subsequently amended.

41850.5. Any administrative civil penalty imposed by the board pursuant to Section 41813 or 41850 shall be deposited in the Local Government Assistance Account, which is hereby created in the Integrated Waste Management Fund. Any funds deposited in that account shall be used solely for the purposes of assisting local governments in complying with the ~~diversion~~ requirements established under Section 41780, and shall not be used by the board for administrative purposes.

41851. Nothing in this chapter shall infringe on the existing authority of counties and cities to control land use or to make land use decisions, and nothing in this chapter provides or transfers new authority over that land use to the board.

PART 3. STATE PROGRAMS

Chapter 18.5. State Agency Integrated Waste Management Plan

42921. (a) ~~Each state agency and each large state facility shall divert at least 25 percent of all solid waste generated by the state agency from landfill disposal or transformation facilities by January 1, 2002, through source reduction, recycling, and composting activities.~~

~~(b)~~ On and after January 1, ~~2004~~ 2010, each state agency and each large state facility shall adequately implement the diversion programs set forth in its integrated waste management plan.

(b) The diversion programs in the integrated waste management plan shall be designed to meet the following disposal reduction goals:

(1) From January 1, 2010 to December 31, 2011, annual disposal shall not exceed 2006 disposal.

(2) From January 1, 2012 to December 31, 2019, annual disposal shall be reduced by 25% compared to 2006 disposal.

(3) Starting on January 1, 2020, annual disposal shall be reduced by 50% compared to 2006 disposal.

~~divert at least 50 percent of all solid waste from landfill disposal or transformation facilities through source reduction, recycling, and composting activities.~~

~~42922. (a) On and after January 1, 2002, upon the request of a state agency or a large state facility, the board may establish a source reduction, recycling, and composting requirement that would be an alternative to the 50 percent requirement imposed pursuant to subdivision (b) of Section 42921, if the board holds a public hearing and makes all of the following findings based upon substantial evidence on the record:~~

~~(1) The state agency or a large state facility has made a good faith effort to effectively implement the source reduction, recycling, and composting measures described in its integrated waste management plan, and has demonstrated progress toward meeting the alternative requirement as described in its annual reports to the board.~~

~~(2) The state agency or the large state facility has been unable to meet the 50 percent diversion requirement despite implementing the measures described in paragraph (1).~~

~~(3) The alternative source reduction, recycling, and composting requirement represents the greatest diversion amount that the state agency or the large state facility may reasonably and feasibly achieve.~~

~~(b) In making the decision whether to grant an alternative requirement pursuant to subdivision (a), and in determining the amount of the alternative requirement, the board shall consider circumstances that support the request for an alternative requirement, such as waste disposal patterns and the types of waste disposed by the state agency or the large state facility. The state agency or the large state facility may provide the board with any additional information that the state agency or the large state facility determines to be necessary to demonstrate to the board the need for the alternative requirement.~~

~~(c) If a state agency or a large state facility that requests an alternative source reduction, recycling, and composting requirement has not previously requested an extension pursuant to Section 42923, the state agency or the large state facility shall provide information to the board that explains why it has not requested an extension.~~

~~(d) A state agency or a large state facility that has previously been granted an alternative source reduction, recycling, and composting requirement may request another alternative source reduction, recycling, and composting requirement. A state agency or a large state facility that requests another alternative requirement shall provide information to the board that demonstrates that the circumstances that supported the previous alternative source reduction, recycling, and composting requirement continue to exist, or shall provide information to the board that describes changes in those previous circumstances that support another alternative source reduction, recycling, and composting requirement. The board shall review the original circumstances that supported the state agency's or the large state facility's request, as well as any new information provided by the state agency or the large state facility that describes the current circumstances, to determine whether to grant another alternative requirement. The board may approve another alternative requirement if the board holds a public hearing and makes both of the following findings based upon substantial evidence in the record:~~

~~(1) The state agency or the large state facility has made a good faith effort to effectively implement the source reduction, recycling, and composting measures described in its integrated waste management plan, and has demonstrated progress toward meeting the alternative requirement as described in its annual reports to the board.~~

~~(2) The alternative source reduction, recycling, and composting requirement represents the greatest diversion amount the state agency or the large state facility may reasonably and feasibly achieve.~~

~~(e) If the board establishes a new alternative requirement or rescinds the existing alternative requirement, the board shall do so at a public hearing. If the board establishes a new alternative requirement, it shall make all of the following findings based upon substantial evidence in the record:~~

~~(1) The state agency or the large state facility has made a good faith effort to effectively implement the source reduction, recycling, and composting measures described in its integrated~~

~~waste management plan, and has demonstrated progress toward meeting the alternative requirement as described in its annual reports to the board.~~

~~(2) The former alternative diversion requirement is no longer appropriate.~~

~~(3) The new alternative requirement represents the greatest amount of diversion that the state agency or the large state facility may reasonably and feasibly achieve.~~

~~(f) (1) No single alternative requirement may be granted for a period that exceeds three years and, if after the granting of the original alternative requirement, another alternative requirement is granted, the combined period that the original and the new alternative requirement is in force and effect shall not exceed a total of five years.~~

~~(2) No alternative requirement shall be granted for any period after January 1, 2006, and no alternative requirement shall be effective after January 1, 2006.~~

~~(3) No state agency or large state facility shall be granted an alternative requirement if the state agency or the large state facility has failed to meet, on or before January 1, 2002, the requirements of subdivision (a) of Section 42921.~~

~~(g) (1) When considering a request for an alternative source reduction, recycling, and composting requirement, the board may make specific recommendations for the implementation of the alternative plan.~~

~~(2) Nothing in this section precludes the board from disapproving any request for an alternative requirement.~~

~~(3) If the board disapproves a request for an alternative requirement, the board shall specify, in writing, the reasons for its disapproval.~~

~~(h) If the board grants an alternative source reduction, recycling, and composting requirement, the state agency may request technical assistance from the board to assist it in meeting the alternative source reduction, recycling, and composting requirement. If requested by the state agency or the large state facility, the board shall assist with identifying model policies and plans implemented by other agencies.~~

~~(i) A state agency or a large state facility that is granted an alternative requirement pursuant to this section shall continue to implement source reduction, recycling, and composting programs, and shall report the status of those programs in the report required pursuant to Section 42926.~~

~~(j) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.~~

~~42923. (a) The board may grant one or more single or multiyear time extensions from the requirements of subdivision (a) of Section 42921 to any state agency or large state facility if all of the following conditions are met:~~

~~(1) Any multiyear extension that is granted does not exceed three years, and a state agency or a large state facility is not granted extensions that exceed a total of five years.~~

~~(2) An extension is not granted for any period after January 1, 2006, and an extension is not effective after January 1, 2006.~~

~~(3) The board considers the extent to which a state agency or a large state facility complied with its plan of correction before considering another extension.~~

~~(4) The board adopts written findings, based upon substantial evidence in the record, as follows:~~

~~(A) The state agency or the large state facility is making a good faith effort to implement the source reduction, recycling, and composting programs identified in its integrated waste management plan.~~

~~(B) The state agency or the large state facility submits a plan of correction that demonstrates that the state agency or the large state facility will meet the requirements of Section 42921 before the time extension expires, including the source reduction, recycling, or composting steps the state agency or the large state facility will implement, a date prior to the expiration of the time extension when the requirements of Section 42921 will be met, existing programs that it will modify, any new programs that will be implemented to meet those requirements, and the means by which these programs will be funded.~~

~~(b) (1) When considering a request for an extension, the board may make specific recommendations for the implementation of the alternative plans.~~

~~(2) Nothing in this section shall preclude the board from disapproving any request for an extension.~~

~~(3) If the board disapproves a request for an extension, the board shall specify its reasons for the disapproval.~~

~~(c) (1) In determining whether to grant the request by a state agency or a large state facility for the time extension authorized by subdivision (a), the board shall consider information provided by the state agency or the large state facility that describes relevant circumstances that contributed to the request for extension, such as a lack of markets for recycled materials, local efforts to implement source reduction, recycling, and composting programs, facilities built or planned, waste disposal patterns, and the type of waste disposed by the agency or facility.~~

~~(2) The state agency or the large state facility may provide the board with any additional information that the state agency or the large state facility determines to be necessary to demonstrate to the board the need for the extension.~~

~~(d) If the board grants a time extension pursuant to subdivision (a), the state agency may request technical assistance from the board to assist it in meeting the diversion requirements of subdivision (a) of Section 42921 during the extension period. If requested by the state agency or the large state facility, the board shall assist the state agency or the large state facility with identifying model policies and plans implemented by other agencies.~~

~~(e) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.~~

42927.5. A community college district may impose fees in amounts sufficient to pay the costs of preparing, adopting, and implementing a state agency integrated waste management plan prepared pursuant to this division. The fees shall be based on the types or amounts of the solid waste, and shall be used to pay the actual costs incurred by the community college district in preparing, adopting, and implementing the plan, as well as in setting and collecting the fees. In determining the amounts of the fees, a community college district shall include only those costs directly related to the preparation, adoption, and implementation of the plan and the setting and collection of the fees. The fees may also include an amount to cover actual costs incurred since the effective date of this Chapter.

~~42928. (a) The board may adopt regulations that establish specified criteria for granting, reviewing, and considering reductions or extensions pursuant to Sections 42922 and 42923.~~

~~(b) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.~~

Solid Waste

This RCP chapter is meant to take a close look at some of the challenges in solid waste management that our region is facing. It will provide a framework for taking the first steps toward a solution. Because this will be an ongoing process, there are some issues – such as hazardous waste, that have not been specifically addressed. However, it is implied that many of the policies described for solid waste management will also apply to management of hazardous wastes.

THE CHALLENGE

Waste comes from homes, businesses, and industrial enterprises. Between 1995 and 2005, our region disposed of approximately 33 million tons of municipal solid waste (MSW) into local landfills each year.[1] The average resident disposes of approximately 2.5 pounds of trash a day[2] while non-residential disposal adds up to 1.2 pounds disposed for every $10 of sales receipts.[3] Although we have made great strides in reducing per capita generation – in 1990, residential disposal was estimated at 3.1 pounds per day, existing landfills will not be enough to accommodate our ever-growing population.

Traditional solid waste management strategies have relied heavily on creating high capacity, regional landfills (megafills) and, to a lesser extent in California, incineration technologies to address disposal issues. However, due to significant public opposition, unavalability of suitable land, environmental concerns, and the regulatory framework, it has become increasingly difficult to expand and/or site, permit, and operate new landfills and waste-to-energy (incineration) facilities. Federal, State, and local zoning regulations restrict the number of sites suitable for development. Restrictions on land use include areas with unstable soils and terrain, landslide-susceptibility, fault areas, seismic impact zones, land near airports, and land in 100 year flood plains. Potential landfill sites must consider migration control of leachate and methane, soil type to provide a firm foundation, hydrologic settings that will affect landfill layout and drainage characteristics, and a host of other factors. In addition, local public opinion plays a big role when landfills are being sited.[4,5]

Dwindling landfill capacity and increasing health and environmental concerns have forced both the region and the state to make concerted efforts at developing other waste management methods including reducing the amount of waste that goes into landfills. The costs for landfilling our garbage will continue to increase as landfill space decreases. These costs will ultimately be passed on to residents and businesses in the form of higher

disposal fees and eventually, in conspicuous impacts to public health and the environment.

Overflowing landfills are only a symptom of a bigger problem — the mismanagement of our natural resources. The result of this mismanagement is evident in the mountains of garbage that we produce and the associated health and environmental impacts that result. For example, to obtain the resources used in the manufacturing and production of many of the goods that we use everyday, the mining industry moves an estimated 28 billion tons of soil and rocks each year (globally).[7] A 1999 study puts this figure at 48.9 billion tons when biomass extraction is included and 8.2 tons per capita average global resource consumption. When broken down by country, figures show that on a per capita level, extraction of raw materials increases with development status.[8]

The goods produced from these resources are usually single-use products that we effortlessly replace or throw away. There is an inextricable link between our current level of resource consumption, the waste we produce, and many environmental problems. Mining leaves behind a wake of destructive impacts. From threatening local and global biological diversity through habitat destruction to increased chemical contamination, erosion, and silting of lakes and streams to toxic air pollution containing arsenic and lead emissions.[9] Our current rate of natural resource extraction has already created health and environmental impacts that will last long into future generations.

THE PLAN

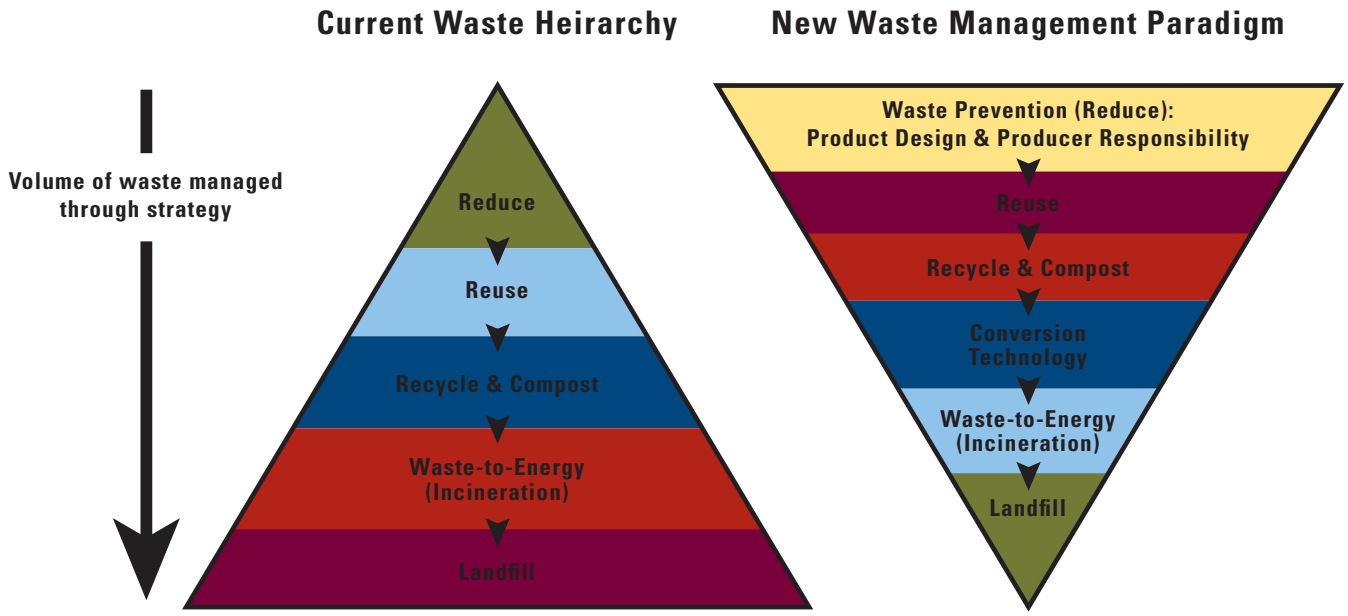
We will need a combination of both short and long term solutions to effectively address our overwhelming waste problem. In the short term, we will still need to rely heavily on landfills and, when local facilities have filled to capacity, exporting our waste to other areas, leading to higher trash rates and added traffic congestion and air pollution. In the long term, we will need to change the way we think about trash and move towards a system of waste prevention and minimization. The move towards this system will take time and require a variety of waste management strategies. Our goal is to achieve maximum diversion from landfills through emerging technologies with diversion credit.

Strategies for Managing Our Waste

Landfills today are technically sophisticated, highly regulated, and closely monitored by many local and state agencies. Methane and leachate collection systems are installed in many facilities and state-of-the-art leachate[10] barriers (landfill liners) are required under current regulations. Landfill operations in Southern California have beneficial methane capture technologies that turn methane emissions into energy. Average landfill gas emissions are comprised of 50% methane. The Puente Hills landfill currently produces 50 MW (gross) of power from landfill capture operations which it sells to Southern California Edison.[11]

Landfills fill a critical need today and will continue to be needed well into the future. Even as we employ all waste prevention, recycling, reuse, composting, and conversion technology strategies, there will always be some inefficiencies in the system and therefore, waste that will need to be disposed at a landfill. The challenge will be to change our idea

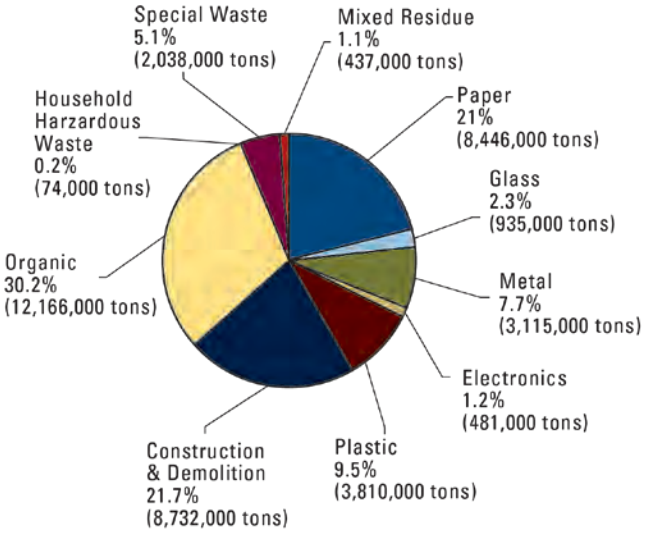
Shrinking local landfill capacity is also forcing us to transport waste to more distant landfills. A prime example of this is the planned waste-by-rail system being developed by the County Sanitation Districts of Los Angeles County. The system is designed to address the projected shortfall of disposal capacity in Los Angeles County by transporting post-recycled waste to an out-of-county landfill. The rail system will have multiple starting points at large-scale materials recovery facilities throughout Los Angeles County.[15] Existing rail lines will be used to transport the waste to Mesquite Regional Landfill, in Imperial County located approximately 35 miles east of Brawley. The 2,290 acre landfill is nearing the final stages of construction and is expected to be operational by 2011/2012. It is permitted to accept up to 20,000 tons of waste per day from L.A. County and 1,000 tons per day from Imperial, with a maximum capacity of 600 million tons of solid waste over a 100 year lifespan.[16,17] Due to potential air quality impact that may result from solid waste rail operations, it is expected that L.A. County waste by rail operations will be consistent with



strategies developed for the Air Quality Management Plan (AQMP) and the Regional Transportation Plan (RTP).

Although exporting waste is not a preferred waste management option, it is a necessary strategy for ensuring the County has a place to dispose of the garbage generated by County residents and businesses. Unlike other states, California does an excellent job of keeping solid waste within its borders. Only 1% of waste generated in California is exported out of state. In the SCAG region, less than 1% of our waste is exported outside of the region.[18]

Figure XX: Material Classes in California's Overall Disposed Waste Stream, 2003[ref endnote]



Diverting Garbage Away from Landfills

In 1989, the legislature passed the California Integrated Waste Management Act (AB 939).[19] This bill mandated a 50% solid waste diversion[20] rate by the year 2000 for all cities, counties, and applicable regional agencies in California, but did not include a plan or funding for achieving the diversion rate.

Since then, Californians have done a great job in reducing the amount of waste sent to landfills. Although not all individual jurisdictions have managed to achieve the 50% diversion rate, all jurisdictions are making good-faith efforts to comply with the unfunded mandate. The estimated diversion rate for California in 2006 is 54%. This diversion rate translates to 50.1 million metric tons of waste (out of 92.2 million metric tons of waste generated) that avoided disposal to landfills.[21] Diversion is generally defined as the reduction or elimination of the amount of solid waste from solid waste disposal (to landfill or incineration). Thus far, only source reduction (waste prevention), recycling, reuse, and composting activities are considered diversion.

Economic Benefits of Diversion

Diversion activities create jobs, add local revenue, and help stimulate many economic sectors. Some employment opportunities created by these activities include government and private staffed collectors, recyclable material wholesalers, compost and miscellaneous organics producers, materials recovery facilities, glass container manufacturing plants, plastics converters, and

retail used merchandise sales. A 2001 report released by UC Berkeley stated that, "diverting solid waste has a significantly higher (positive) impact on the economy than disposing it." Diversion also helps communities save money by avoiding payment of tipping fees on each ton of waste disposed. The UC Berkeley study estimated that statewide economic impacts from disposal and diversion at 1999 rates were approximately 17 to 20 percent higher than the impacts if all the waste had been disposed (Goldman and Ogishi, 2001). This is because reuse and recycling are inherently value-adding, whereas disposal is not; and value-adding processes support jobs and economic activity (REI, 2001).

The California waste stream is primarily composed of organic (food) waste, paper products, and construction and demolition debris. Harder-to-decompose items such as plastic, glass, metal, electronic, and hazardous wastes are also present in the waste stream in significant amounts. **(see Figure: Material Classes for CA Waste Stream).**

Reuse and Recycling

California hosts approximately 5300 recycling and reuse facilities, employing 84,000 people and generating an annual payroll of $2.2 billion with $14.2 billion in annual revenues.[22] However, California's recycling market is still on shaky ground, especially because of competition from foreign recycling markets. Many

TABLE X.X. ECONOMIC IMPACTS OF 1999 WASTE GENERATION GOING TO DISPOSAL OR DISPOSAL AND DIVERSION

Region		Estimated Final Sales 1999 (billions of dollars)	Impact on Economy			
			Output[b] (billions of dollars)	Total Income[c] (billions of dollars)	Value Added[d] (billions of dollars)	Number of jobs created
All California	Disposal only	7.5	18.0	6.8	9.0	154, 000
	Disposal and Diversion	9.2	21.2	7.9	10.7	179,000
Southern Californiaa	Disposal only	4.1	9.6	3.6	4.7	82,000
	Disposal and Diversion	5.1	11.3	4.2	5.6	95,000

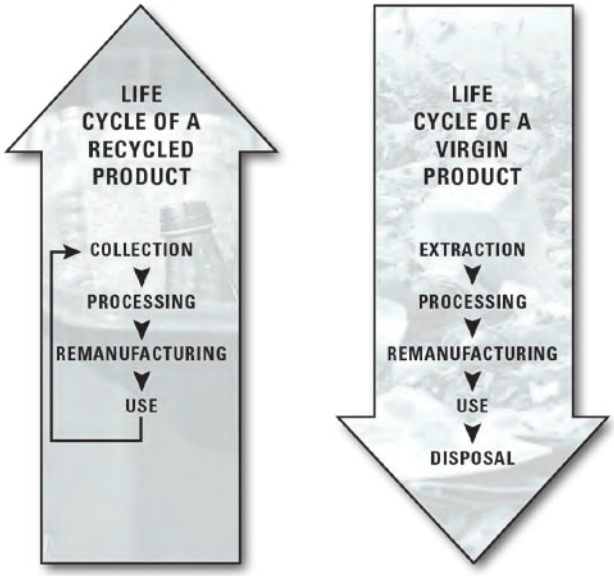
Table adapted from Goldman, G. and A. Ogishi, 2001. The Economic Impact of Waste Disposal and Diversion in California. A Report to the California Integrated Waste Management Board.

[a] Southern California region includes all six SCAG region counties plus San Diego County.

[b] Output impact is a measure of how the disposal sectors influence total sector sales in the economy.

[c] Income impact measures income attributed to disposal-related economic sectors.

[d] Value added is the increase in the value of goods and services sold by all sectors of the economy.



countries will pay a premium for our recyclables because they lack their own raw materials. In an effort to support the local recycling industry, the Integrated Waste Management Board has developed the Recycling Market Development Zone (RMDZ) program. The program provides loans, technical assistance, and free product marketing to businesses that use materials from the waste stream to manufacture their products.[23] Although this market development program is important, local governments have continually stressed the need for the State to take a leadership role in developing markets since our services and products are trading and competing on a global basis, and thus are susceptible to events/market fluctuations throughout the world. Based on the economic principle of supply and demand, recyclables will end up in landfills if markets are not developed or strengthened.

There are numerous benefits to recycling and reuse programs. Reuse and recycling reduce the need for landfilling and prevent pollution that may be caused by the manufacturing, transportation, and use of products from virgin materials. They help conserve natural resources (timber, water, minerals); sustain the environment for future generations; save energy and avoid fossil fuel use from extractive industries; decrease emission of GHGs that contribute to global climate change; protects and expands U.S. manufacturing jobs; and increases U.S. competitiveness.[24]

A 1994 Tellus Institute study showed that with the exception of aggregate materials for road base, many materials show energy savings by using recycled materials instead of virgin materials. The range of differences in energy saved varies greatly. At the high end is aluminum for which the difference in virgin versus secondary production is 142.68 MMBtu per ton of intermediate product (i.e., it takes 142.68 MMBtu per ton more to process aluminum from raw ore than it does to process the same product from recyclables). At the low end is molten glass for which the energy difference is only 1.54 MMBtu per ton of product.[25] A more recent life cycle assessment study from ALCOA researchers has shown that it takes 95% less energy to recycle aluminum than to create it from raw materials.[26]

Construction and Demolition (C&D) Debris

Construction and demolition debris comprises 21.7% of California's overall disposed waste stream. This equates to approximately 8.7 million tons of C&D debris disposed to landfill. Lumber debris makes up half of that figure, followed by concrete, asphalt roofing, gypsum board, and composite/ remainder C&D.[27]

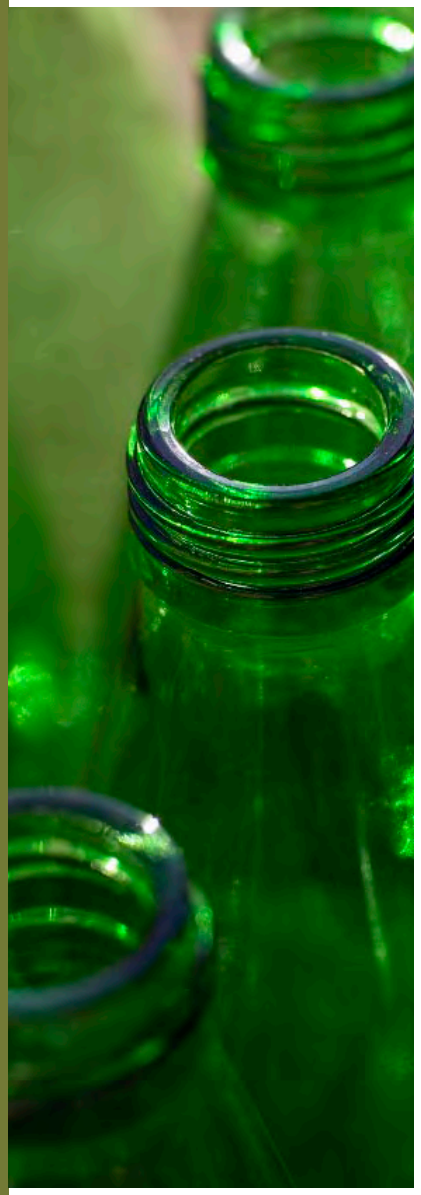
Addressing C&D waste prevention can be as simple as using best management practices during construction such as advanced framing, double checking measurements to reduce sizing mistakes, and using durable materials that need less frequent replacement.[28] It also means using green building design principles to maximize the use of remanufactured, recycled, or more efficient materials or materials that are designed to be replaced in a modular manner. Unlike demolition waste, up to 80% of construction waste is reusable or recyclable.[29] C&D diversion rates have reached as high as 97% on individual State of California projects, and are typically at least 50-75% in green buildings[30].

Cities are starting to institute green building ordinances that require maximum recycling of C&D debris for many types of new construction. Uniform statewide requirements for green building or C&D recycling ordinances do not yet exist, although state legislation has been introduced to address this issue. Currently, each city can develop its own requirements: defining the size, cost, and type of project that is subject to C&D recycling as well as the amount of material recycling required can differ a great deal from city to city.

The 2003 report to California's Sustainable Building Task Force provides a comprehensive and convincing study of the value of green building savings. It was found that although there were minimal increases of about 2% in up-front costs to add green building features, life cycle savings resulted in 20% of total construction costs – more than 10 times the initial investment. For example, an initial up-front investment of up to $100,000 to incorporate green building elements into a $5 million project would result in a savings of $1 million in today's dollars over the life of the building.[31]

Food Waste, Organics, and Composting

Californians throw away more than 5 million tons of food scraps each year. Food waste makes up 14% of California's waste stream. This includes all food being disposed by residences, businesses, schools, prisons, and other institutions. Green material collection programs have been implemented in many cities and counties, but not until recently has collection of food scraps been considered. Management of food scraps provides additional opportunities to help meet the State's diversion goals as well as provide greater uses for this resource. The CIWMB suggests the following order for food scrap management: (1) prevent food waste, (2) feed people, (3) convert to animal feed and/or rendering, and (4) compost. Large events and venues, public facilities (e.g., public agency and school cafeterias), and



private business such as restaurants and grocery stores could all be targeted for food waste diversion activities.[32]

Decomposition of food waste and other organics are a major source of greenhouse gas emissions from landfills. Organic waste comprises 30% of waste disposed to landfills. That figure includes food scraps, textiles, composite organics, and green material like landscape and tree trimmings, grass clippings, and agricultural residues. Diverting organic wastes to composting prevents the production of methane, which is produced during decomposition under anaerobic (oxygen-lacking) conditions such as those found in landfills. Composting has many environmental benefits. In addition to reducing landfill volume and emissions by diverting organic waste, compost can be used in the following ways: to enhance garden and agricultural soils, in wetland construction, as landfill cover, for erosion control, and in land/stream reclamation projects. Although there are environmental concerns associated with composting, primarily emissions and odor complaints, advancements in composting technologies and proper implementation of these technologies are able to overcome these concerns.

Conversion Technologies

Conversion technologies (CTs) refer to a diverse set of processes used to convert waste products into high-value goods such as industrial chemicals or gas, liquid, and solid fuels. Fuel products can be burned to produce energy or refined for higher quality uses to make a variety of industrial products.[33]

The attraction of CTs is their ability to convert landfill waste into products that can take the place of fossil fuels mined from natural resources.

CTs target *post-recycled* municipal solid waste residuals currently destined for disposal at landfills as their feedstock. That is, before waste is sent to a CT facility, it is sorted to make certain recyclables are removed and collected. Many CT proponents feel CTs with recycling offer a much better alternative than incineration or disposal to landfill. In addition, CTs have the capability of recovering additional recyclable materials, especially metals and glass that might otherwise not be feasibly recoverable since it operates at an optimum level when recyclables are extracted prior to the conversion process.

A study conducted for CIWMB compared a life cycle analysis of landfills (with various stages of landfill gas collection), waste to energy (WTE) combustion (incineration), and hypothetical conversion technologies. It was found that the hypothetical CT scenario could potentially have a two times lower net energy consumption when compared to the incineration scenario and up to 11 times lower than landfill without energy recovery. The CT scenario included energy savings (10-20% of the total net energy savings) from additional materials recycling prior to conversion and the offsets associated with the prevention of extraction and production of virgin materials.[34] However, the environmental benefits of conversion technology scenarios are highly dependent on their ability to achieve high conversion efficiencies and high materials recycling rates.

At the present time, conversion technologies are considered ineligible as a diversion strategy under AB939 and the permitting and siting of CT facilities has been met with opposition. Conversion technologies have been around for decades, but it is only recently that their applicability to solid waste management has begun to be fully developed. At this time, the successful development and use of CTs is occurring in Japan, Germany, and the UK.

Three main categories of conversion technologies are being developed for management of solid waste - thermal, chemical, and biological conversion – as well as systems that utilize a combination of 2 or more categories of conversion to more effectively convert the various components of the waste stream.

- Thermal (thermochemical) conversion is characterized by processes that use high temperatures to achieve high conversion rates of dry, organic material. These processes include gasification, pyrolysis, plasma arc, and catalytic cracking. *Advanced thermal conversion (advanced thermal recycling) primarily refer to technologies that employ only pyrolysis and/or gasification to process municipal solid waste.*[36] The primary products of thermochemical conversion technologies include: fuel gas (syngas - CO_2, CO, CH_4, H_2), heat, liquid fuel, char, and ash.[37]

- Biological (biochemical) conversion processes rely on microorganisms to break down the biogenic, organic fraction of the waste stream. These processes are focused on the conversion of biodegradable organics found in MSW residue into high energy products. The products of bioconversion are biogas (CH_4 and CO_2), biofuel (ethanol, biodiesel, fuel oil, etc.), and residue that can be used for compost. Biogas usually has less energy (Btu/ft^3) than syngas produced by thermal conversion systems.[38] Non-biodegradable organic feedstocks, such as most plastics, are not convertible by biochemical processes.

- Chemical (physicochemical) conversion processes use lower temperatures than thermal conversion and have lower reaction rates. These processes rely on chemical reactions and are focused on the conversion of organic wastes into high energy products. Processes, such as acid hyrolysis, thermal depolymerization, and fermentation, typically focus on generating fuels such as ethanol or biodiesel.

Maximizing Diversion - A New Paradigm

In the last 10-15 years there has been a strong movement to recognize the link between the waste we generate and the natural resources we consume. Today's economy is based on the extraction of "cheap" resources to make products that are largely designed to end up in landfills. Waste is a reflection of our inefficient use and mismanaged consumption of finite, natural resources. The 2004 Growth Vision recognized this and stated that "management of solid waste (and hazardous waste) must be sustainable in order to efficiently manage natu-

LIFE CYCLE ASSESSMENTS (ANALYSES)

Life Cycle Assessments (LCAs) need not be limited to analyzing the life cycle of a single product. LCA is a methodology that can analyze the interactions of a technological system with the environment. It can be used as a decision-making tool to help weigh environmental and health impacts between various waste management options. If used correctly,9 LCAs can answer questions like, "Are impacts from manufacturing aluminum cans from raw material really much worse than the impacts from re-manufacturing of recycled aluminum and if so, how much worse?" and "Have the costs of environmental and health impacts, such as losing ecosystem services10 and the loss of worker days been calculated into the costs?" Governments, private firms, consumer organizations, and environmental groups can

ral resources and in order to protect the environment today and in the future."

A new paradigm is taking shape that builds on all the waste diversion strategies that were previously discussed. Although the three Rs of solid waste management – Reduce, Reuse, Recycle – still hold true, a renewed emphasis on the first R is taking hold. We need to go beyond current waste diversion strategies by addressing waste elimination at the source and distributing the responsibility for waste on both the consumer and the producer. Instead of managing just the end results of our consumption-related activities (trash), we focus on resource conservation and management. The aim is to create a whole system approach to the way materials flow through society, where all discarded materials are resources for others to use and resource conservation and recovery is built into every process. It also means designing and managing products and processes to reduce impacts to the environment, volume and toxicity of waste and materials, and waste of natural resources, as well as managing materials flow to prevent the creation of un-recyclable products. We can probably never achieve 100% materials efficiency but, "we can get darn close!"[39]

Strategies to maximize diversion look at the entire product life cycle to assess the true economic, environmental, and health-related costs of manufacturing products. Life cycle assessments[40] (LCAs) attempt to appraise all the inputs and outputs that are associated with the creation and disposal of a product. Included are the direct inputs to the production process, associated wastes and emissions, and the future (downstream) fate of the product. Using aluminum recycling and production as an example, downstream effects that should be analyzed would include the energy consumption and emissions of smelters used to melt the raw ore versus recyclable cans and the ultimate fate and use of the product. In some cases, recyclables that have been locally collected are exported for use overseas.

LCAs and similar applications can identify deficiencies in a process and help compare the benefits and costs of multiple systems. By evaluating the existing materials flowing through a community, we can identify opportunities to take what one business considers a byproduct or waste and provide that material to another business that can use that material as production feedstock. In addition, an LCA that compares recycling systems with other waste management strategies (such as, disposal at landfills or disposal at conversion technology facilities) would provide useful information making future waste management actions. Such an LCA for California's waste management system would be a useful tool for local policymakers.

Promoting these types of strategies is good regional policy as existing businesses can save money by creating efficiencies in production and government agencies and other organizations have better analytical tools for making important decisions.[41]

Product Stewardship and Extended Producer Responsibility

This new paradigm requires that we change the current solid waste management hierarchy to one that focuses on product stewardship and extended producer responsibility principles because one of the most effective ways to manage waste is to prevent it from being produced in the first place.

Product stewardship is a product-centered approach to environmental protection. It extends the responsibility for a product to everyone involved in the product lifecycle. This means that manufacturers and producers design products that are recyclable, reusable, less toxic, less wasteful, and/or more durable. It also means getting rid of excessive packaging such as the cardboard box that encloses a plastic medicine bottle. Retailers and consumers are then responsible for ensuring that proper recycling and disposal of products occur.

Product stewardship is often used interchangeably with Extended Producer Responsibility (EPR). However, EPR focuses the brunt of the responsibility for creating an environmentally compatible product on the manufacturers and producers of the product. Producers retain responsibility for their end-of-life (EOL) products. This provides them with incentives for designing products for recycling, reuse and easy dismantling.[42] For example, businesses making products that are leased, such as HP (photocopiers) have long known that their products will be returned so they have learned to make remanufacturing profitable. When businesses are compelled to internalize the true costs of wasteful packaging and inefficient material use, there is incentive to create more innovative and efficient waste management strategies.

EPR policies should give producers an incentive to design products that:

- Use fewer natural resources;
- Use greater amounts of recycled materials in manufacturing;
- Can be reused;
- Can be more easily treated/dismantled and recycled;
- Reduce or eliminate the use of hazardous substances or materials in the manufacturing of products.

The EPR approach should be seen as a system for preventive environmental policy-making. EPR promotes a sustainable approach to resource use and reduces the quantity of solid waste going to a landfill, by diverting end of life products to re-using, recycling, or other forms of recovery. Many corporations are recognizing the value of EPR and have developed voluntary EPR strategies in their organizations.

The Solid Waste Action Plan

All of the strategies that have been laid out are meant to provide guidance and background for implementing the action plan that follows. The goal attempts to encapsulate the vision for solid waste and resource management that will move our region toward a more sustainable and healthier future. This will require a coordinated effort of implementing all of the

short-term and long-term policies/actions that are contained within this plan. Some, of which require changing how our whole region thinks about solid waste management issues.

Recycling, composting, conversion technologies, and landfills all play a part in moving towards maximizing diversion. We will need to employ this mix of strategies to handle current waste disposal needs as we transition to a system of real natural resource management. Even if we achieve close to 100% materials efficiency, there will still be residual waste that will need to be disposed at landfills or managed with conversion technologies.

SOLID WASTE GOALS

- A region that conserves our natural resources, reduces our reliance on landfills, and creates new economic opportunities in the most environmentally responsible manner possible.

SOLID WASTE OUTCOMES

- All SCAG region jurisdictions should meet a 40% waste disposal rate by 2035 to minimize disposal to landfill provided appropriate utilization of technologies are permitted and diversion credit is provided by the State for waste management strategies including, but not limited to, appropriate and environmentally sound recycling, composting, and conversion technologies with diversion credit as well as other actions and strategies contained in this chapter, such as product stewardship and extended producer responsibility.

- Conversion and other alternative technologies should be available as a diversion strategy in the next five years with one or more new conversion technology facilities sited in the SCAG region by 2020.

IGR/Best Practices	Legislation	Coordination	Constrained Policies	Potential for Direct/Indirect Benefits									Other Benefits	
				Land Use	Transportation	Air Quality	Water	Energy	Open Space	Economy	Security	Solid Waste	Public Health	Climate Change
SCAG Policies (SCAG policies shall be subject to consideration for future Overall Work Plans)														
		X	SW-1 SCAG shall encourage all levels of government to advocate for source reduction and waste prevention.			X	X	X		X		X	X	
X		X	SW-2 SCAG shall encourage policies that: (a) promote the expansion of recycling programs and facilities that provide local recycling services to the public and private sectors and (b) encourage the development of viable, local, and sustainable markets to divert materials from landfills (e.g., recycling markets).			X	X	X		X		X		X
X			SW-3 SCAG shall adopt and implement a recycled content procurement program and participate in programs that promote the purchase of recycled content products			X	X	X		X		X		X
		X	SW-4 SCAG shall support and encourage the CIWMB to conduct comprehensive life cycle assessments of all components of the waste management practices including but not limited to, waste disposal to landfills, composting, recycling, and conversion technologies. A comprehensive analysis must include environmental impacts, health effects, emissions, use of resources and personnel, costs of same to collect wastes and recyclables, transportation costs (local, within U.S. or international), processes to separate recyclables, and production of end products using collected recyclables and raw materials.			X	X	X				X		X
	X		SW-5 SCAG shall continue to support and encourage legislation that advocates for the elimination of unnecessary duplication and/or restrictive regulations that hinder recycling, reuse, composting and conversion of solid waste and redefines conversion technologies as a diversion strategy to allow development of these facilities in the SCAG region.			X	X	X		X		X		X
		X	SW-6 SCAG should coordinate region-wide initiatives on source reduction, reuse, recycling, composting, and conversion technology to increase economies of scale.			X	X	X		X		X		X
		X	SW-7 SCAG should encourage the equal distribution of industrial impacts among all income levels from all types of solid waste management facilities including recycling, composting, and conversion technology facilities.	X		X	X	X		X		X		X
		X	SW-8 SCAG shall support the development of public education and outreach efforts to increase awareness of the benefits of a regional policy to maximize diversion.			X	X	X		X		X		X

IGR/Best Practices	Legislation	Coordination	Constrained Policies	Potential for Direct/Indirect Benefits									Other Benefits	
				Land Use	Transportation	Air Quality	Water	Energy	Open Space	Economy	Security	Solid Waste	Public Health	Climate Change
Local Government Policies														
X			SW-9 Local governments should update general plans to reflect solid waste sustainability issues such as waste reduction goals and programs (1996 RCP; 135).	X		X	X	X	X			X		X
X			SW-10 Local governments should discourage the siting of new landfills unless all other waste reduction and prevention actions have been fully explored. If landfill siting or expansion is necessary, landfills should be sited with an adequate landfill-owned, undeveloped land buffer to minimize the potential adverse impacts of the landfill in neighboring communities.	X		X	X	X	X	X		X		X
X			SW-11 Local governments should discourage exporting of locally generated waste outside of the SCAG region. Disposal within the county where the waste originates shall be encouraged as much as possible. Green technologies for long-distance transport of waste (e.g., clean engines and clean locomotives or electric rail for waste-by-rail disposal systems) and consistency with AQMP and RTP policies should be required.	X	X	X	X	X	X	X		X	X	X
X			SW-12 Local governments should adopt Zero Waste goals and practices and look for opportunities for voluntary actions to exceed the 50% waste diversion target.			X	X	X		X		X		X
X			SW-13 Local governments should build local markets for waste prevention, reduction, and recycling practices.			X	X	X		X		X		X

IGR/Best Practices	Legislation	Coordination	Constrained Policies	Potential for Direct/Indirect Benefits									Other Benefits	
				Land Use	Transportation	Air Quality	Water	Energy	Open Space	Economy	Security	Solid Waste	Public Health	Climate Change
X	X		SW-14. Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. Construction reduction measures that should be explored for new and remodeled buildings include: • Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. • An ordinance that requires the inclusion of a waste management plan that promotes maximum C&D diversion. • Source reduction through (1) use of building materials that are more durable and easier to repair and maintain, (2) design to generate less scrap material through dimensional planning, (3) increased recycled content, (4) use of reclaimed building materials, and (5) use of structural materials in a dual role as finish material (e.g. stained concrete flooring, unfinished ceilings, etc.). • Reuse of existing building structure and shell in renovation projects. Building lifetime waste reduction measures that should be explored for new and remodeled buildings include: • Development of indoor recycling program and space. • Design for deconstruction. • Design for flexibility through the use of moveable walls, raised floors, modular furniture, moveable task lighting and other reusable building components.	X		X	X	X	X	X		X		X
X	X		SW-15 Local governments should develop ordinances that promote waste prevention and recycling such as: requiring waste prevention and recycling efforts at all large events and venues; implementing recycled content procurement programs; and instituting ordinances to divert food waste away from landfills and toward food banks and composting facilities.			X	X	X		X		X		X
X			SW-16 Local governments should support environmentally friendly alternative waste management strategies such as composting, recycling, and conversion technologies.			X	X	X		X		X		X
X			SW-17 Developers and local governments should develop and site composting, recycling, and conversion technology facilities that are environmentally friendly and have minimum environmental and health impacts.	X		X	X	X				X		X
X		X	SW-18 Developers and local governments should coordinate regional approaches and strategic siting of waste management facilities.	X		X	X	X				X		X
X			SW-19 Developers and local governments should facilitate the creation of synergistic linkages between community businesses and the development of eco-industrial parks and materials exchange centers where one entity's waste stream becomes another entity's raw material by making priority funding available for projects that involve co-location of facilities.	X		X	X	X				X		X
X			SW-20 Developers and local governments should prioritize siting of new solid waste management facilities including recycling, composting, and conversion technology facilities in conjunction with existing waste management or material recovery facilities.	X		X	X	X				X		X
X			SW-21 Local governments should increase programs to educate the public and increase awareness of reuse, recycling, composting, and green building benefits and raise consumer education issues at the County and City level, as well as at local school districts and education facilities.			X	X	X		X		X		X

IGR/Best Practices	Legislation	Coordination	Constrained Policies	Potential for Direct/Indirect Benefits									Other Benefits	
				Land Use	Transportation	Air Quality	Water	Energy	Open Space	Economy	Security	Solid Waste	Public Health	Climate Change
State and Federal Government Policies														
	X		SW-22 CIWMB should create waste diversion incentives to increase waste diversion past 50% including credit for conversion technology.			X	X	X		X		X		X
	X		SW-23 The State and Federal governments should develop and implement new and existing legislation that requires recycled content procurement programs, favoring the purchase of recycled and recyclable products or products with built-in EPR design in all state and federal agencies.			X	X	X		X		X		X
	X		SW-24 Federal and State governments should explore financial incentives such as tax credits, subsidies, and price supports for waste diversion activities that include waste reduction, recycling, composting, and conversion technologies.			X	X	X		X		X		X
	X	X	SW-25 CIWMB, Air Resources Board, and the California Water Resources Board should coordinate to address regulatory challenges and streamline the permitting process for solid waste conversion and composting technologies.			X	X	X				X		X
	X		SW-26 The Federal government and CIWMB should establish policies that provide (a) diversion credit for beneficial use of post-recycled, solid waste residuals managed at non-burn conversion technology facilities, and (b) separate and remove conversion technologies from the definition of "transformation."			X	X	X	X			X	X	X
	X		SW-27 Federal, State, and local governments should support and encourage federal and state incentives for the research and development of pilot or demonstration projects for solid waste conversion technologies.			X	X	X	X			X		X
		X	SW-28 CIWMB should do the following to improve education and awareness of solid waste management issues: (a) actively promote education regarding reuse, recycling, composting and solid waste conversion technology programs; (b) provide information concerning the costs and benefits of these programs to local governments; and (c) facilitate state and local government coordination of consumer awareness programs to minimize unnecessary duplication of effort in solid waste outreach programs carried out by local government.			X	X	X	X	X		X		X
	X		SW-29 The Federal government should provide funding and support for continuation of public education programs on waste management issues.			X	X	X	X	X		X		X

IGR/Best Practices	Legislation	Coordination	Strategic Initiatives	Potential for Direct/Indirect Benefits									Other Benefits	
				Land Use	Transportation	Air Quality	Water	Energy	Open Space	Economy	Security	Solid Waste	Public Health	Climate Change
State and Federal Government Initiatives														
	X		SWSI-1 Federal, State and local governments should support and implement source reduction policies which promote product stewardship through the following actions: • Create incentives for participation in Product Stewardship and Extended Producer Responsibility (EPR) initiatives such as, encouraging public-private partnerships with product stewardship goals (e.g. The European Green Dot system) and offering incentives to producers who use recycled content to encourage growth in the recycled contents market. • Create ordinances with EPR policies that require producers and manufacturers to produce "sustainable" packaging and products, develop life cycle assessments for products, as well as, support the development of infrastructure and markets for the recycling and reuse of these products. EPR principles that should be included are: increasing the useful life of products through durability and reparability; increasing production efficiency to produce less production waste and less packaging waste; increasing recyclable material content and reducing virgin material content; facilitating material or product reuse; and decreasing of the toxicity of products. Packaging should be easily recyclable or biodegradable based on any number of EPR strategies including, Design for the Environment (DfE) or Design for Disassembly (DfD) principles. For example, businesses such as, takeout food distributors, should utilize packaging that is compatible with recycling and composting options available.		X	X	X	X	X	X		X	X	X
	X		SWSI-2 Federal, State and local governments should create tax incentives that help companies derive profit from resource efficiency. Actions such as the following would be included: • Institute Pay As You Throw (PAYT) solid waste disposal systems. • Require that companies take back certain types of packaging for reuse or recycling:		X	X	X	X	X	X		X	X	X

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